

DON'S DIARY

MONDAY

Set off early to BP Buildarobot competition "Challenge to Youth" at the school of electronic engineering, Abingdon, Berkshire. Two years ago I would have driven but now days I take the taxi and frequently the longest way out. As far as I am concerned this is the age of the train. I was amazed by the versatility and ingenuity of our youngsters at this exhibition—sadly only two girls were involved but happily one was in the winning team. I was delighted to have been invited by BP.

Last afternoon I managed to pay a flying visit to County Hall to discuss the National Advisory Body review and other mutual preoccupations. It is always heartening to find administrative colleagues surrounded by even more paper than myself. Someone must, however, break the mould.

Early evening, meet my wife outside a tube station and we visit the home of the university chaplain. A number of principal colleagues were there and we shared a relaxed social occasion which was a great credit to our host and his wife.

Meet an old schoolmate, now director of a neighbouring polytechnic. We discuss those vintage years and how excellent he was as the porter to my Macduff.

Depart from my wife to go to Maria Assumpta for a rehearsal with Chelsea Opera and arrive home very late. There appear to have been no problems during my day's absence. What a relief and how nice to find one is thoroughly dispensable.

TUESDAY

Open conference in college on the Youth Training Scheme and its curriculum implications for Avery Hill College courses. The conference is held on our residential site so I do not have to walk very far. Walking is a growing habit now that my exhaust has packed up.

The conference goes very well, everyone seems well motivated and at the end of the afternoon the main guests join me for a discussion over tea. Let us hope that next week's conference on teacher quality goes as well. Again I am struck by the potential blurring effect of a great deal of the YTS curriculum proposals.

Early evening I take the dogs for a walk round the grounds. Some of the few young lads trying to climb over a wall, and again feel reasonably satisfied. Is this the calm before the storm?

In the evening I talk with Jeffrey, my youngest, about his forthcoming university exams. Chastise my middle child over the phone for getting me theatre tickets for the wrong day, thumb through teacher quality for the thirteenth time, reading again with wonder at Catch 22, and eventually fall asleep with Trotsky, my latest acquisition—a six-month fully fledged, thoroughly invulnerable cat. No fox, fox would disturb his equanimity.

WEDNESDAY

Meetings all morning with senior staff about various proposals relating to staff development and how we can our courses. I see about 15 staff in all and feel heartened that the message about retrenchment is getting through. At the same time we all share and explore the cost of undue retrenchment.

Again I yearn for clarity on costing. In quantitative terms, I recall Pippa's plaintive response to Mr. Jagger's inquiry as to what he supposed he was living at the rate of. "Is my benefactor to be made known to me today?" Will the NAB be our benefactor?

Academic board in the afternoon and it invades the twilight zone. A long agenda and only one item is deferred. Again I am concerned about paper and the dangers of confusing activity with action.

In the evening I take the student president out for a drink of Malibu and come back to find that another principal has phoned and my wife admits she said I was out with the student president. What will become of me?

THURSDAY

The car is repaired. In spite of this, catch the train early to County Hall and experience the mad 8.30am crush at London Bridge. Why didn't I check the train beforehand and when will I learn that Cannon Street is not on the same line as Waterloo? A useful meeting with various colleagues and then race back to Eithan to meet heads of departments. Mid-afternoon finds loads of gas pipes in my back garden. I have too much responsibility already and cannot offer security so I get them moved. Feel quite proud—they were moved within half an hour of asking. Where in I wonder? Perhaps Solomon, my youngest dog, will find them.

Read Zola's *Germinal* and prepare for *The THES*.

FRIDAY

Yes, again, we are on the front page of *The THES*. Chair the publicity meeting and then find the great hall has been invaded and some renovation is beginning. Have visions of grandeur. What will Magnus look like in the great hall?

In the lunch hour rehearse Sullivan's *Cox and Box* with two colleagues and a student. At least we are dramatizing effective and efficient use of resources. Wonder who will come to see/hear it.

In the afternoon I wander round the building and wish again we had a lift in the lower block. Receive an irate phone call from a local head teacher and make a sweet and reasonable phone call to an Inner London Education Authority official.

SATURDAY

Early morning on the road to Winchester in the fog to sing with Chelsea Opera in *Giulio's Alcide*. Marilynn, bless her, drives me, but under my direction we go via Guildford and Dorking and arrive rather late.

Find time to look at King Arthur's table and visit the cathedral before the final rehearsal in Winchester College's amazing new hall. This must be one of the most magnificent of all halls to sing in. My wife meets me for a quick snack and then the performance.

Know by Marilynn's face in the audience that she's having it all. Why can't I share my love of opera with her? The sheer purity of the music takes me away from all trials and tribulations.

We arrive back late. Mother and father have come for the weekend and we have neglected them.

SUNDAY

Early communion and then take mother and father to Greenwich. Let's sit, at one with General Wolfe. Something to do with Abraham and heights. The dogs make a dreadful noise and I begin to look forward to Monday.

The really great joy and enjoyed the present and I never seem to. It's this planning that makes the future overlaid. I must stress the importance of the present next time I speak at a school award ceremony, or talk with young people.

Read Piers Plowman *Pastorale* and marvel again at its richness and comprehensiveness. Langland was so way ahead of his time and certainly had a great deal to say about extending opportunities and growth.

Plot the next day and yet again forget the past and present. It is Mlle. End campus in the morning and I am sure that will bring me back to the present and reality.

Michael Lovitt

The author is principal of Avery Hill College.

Aberdeen merger talks begin

by Olga Wojtas
Scottish Correspondent

The Secretary of State for Scotland is seeking talks with Aberdeen University's principal on a prospective merger of the university with two colleges.

Aberdeen University's court called on Mr George Younger, the Scottish Secretary, and Sir Keith Joseph, the Secretary of State for Education and Science, last February to set up an independent inquiry on a merger with the neighbouring Robert Gordon's Institute of Technology and Aberdeen College of Education.

Mr Younger has now asked George McNicol, the principal, to meet him next week. In his letter, Mr Younger says he has given the merger proposal "most serious consideration" and has been in consultation with Sir Keith on what the Government's response should be.

They have decided it would be helpful to hold discussions with the principal before making a final decision.

Meetings are also planned with the principals of the RGIT and the college

of education, and the chairman of their boards of governors, but no date has been set.

Both the RGIT and the college, neither of which was consulted by the university before the merger call, have so far been very guarded in their reaction to the proposal. But there is a strong feeling that their future would be more secure under the Scottish Education Department than the University Grants Committee.

Professor McNicol told the meeting of the university's general council at the weekend that he was disappointed ministers had not yet made a positive response.

But he added that he hoped an inquiry would be set up as a result of the talks, both in the national interest and the interests of the university and the two other institutions.

All parties would benefit from a more rational use of higher education resources, said the principal, but he recognized that a union could take place only if terms and conditions were negotiated "on the basis of generosity".

Professor McNicol continued: "Problems involved include those of history and sentiment, but the proposals of the court present the opportunity with a historic opportunity to enhance the contribution which all three institutions can make to the quality of education and the culture and prosperity of the country."

Professor McNicol announced that the university had made a surplus of more than £500,000 in 1982/83 and the provisional estimate suggested another surplus in the coming year. This would give the university the opportunity to recover its equilibrium and think about long-term planning and development, he said.

But he warned against the UGC's suggestion of a one or two per cent annual cut in the use of resources, which he said would fundamentally impair the university's work.

"I very much hope wider control will prevail and steady state funding from government resources will be maintained to permit us to make an appropriate contribution to national well-being," he said.

Engineering Council takes on DES

by Jon Turney
Science Correspondent

The Engineering Council has finished setting up its machinery for course accreditation and registration of professional engineers, and can now spend more time on policy matters. Its first job in education policy will be to win the battle with the Department of Education and Science and the University Grants Committee for curriculum money for extended and enhanced degree courses.

The council announced this week that all 53 professional engineering institutions which were recognized by the former Council of Engineering Institutions have become "nominated bodies" under the council's charter and bye-laws, recently approved by the Privy Council. This marks the end of a long, complex transfer of responsibilities from CEI. The names of the 280,000 engineers registered by the CEI now reside in the Engineering Council's computer. And the engineering institutions have agreed on a division into five administrative groups—mechanical, civil, electrical, process and transport.

This means the council can now devote more attention to the "engine of change" function spelled out in the Flinn report on engineering.

Here, a major hurdle next year will be securing funds for the improvement in undergraduate courses outlined in the council's education policy document earlier this year. Council members indicate that the DES approves its proposals—which include a target of 20 per cent of the engineering student intake in universities going on to four-year courses—but will not find extra money.

So the DES and the council between them must persuade the UGC to transfer enough money to engineering education within the existing university budget to cover the enhanced engineering curriculum. The council will be meeting the UGC early in the new year to put the case for such a shift.



Apparatus developed by Oxford University scientists is being used to test the reactions of deep sea divers to new breathing mixtures. Tests have just been carried out at a Norwegian underwater technology centre at Bergen and at Marseilles. They were sponsored by Conex, a company responsible for much of the diving work involved in North Sea oil production. Dr Steve Daniels, of the Hyperbaric Research Group at Oxford, developed the ultrasonic apparatus to detect if bubbles were formed in the tissues of divers using hydrogen instead of the more usual helium in their breathing mixture.

UGC looks at Scots system

The University Grants Committee may support a separate Scottish system of travel awards. There is considerable feeling in Scotland against the imposition of a flat rate travel award, since a high proportion of Scottish students live at home and incur heavy expenses through daily travel.

Sir Peter Swinnerton-Dyer, chairman of the UGC, asked Strathclyde University staff during a visit whether they would support the Scottish Education Department running a different travel award scheme to the Department of Education and Science.

Computer report stresses adaptability

by Patricia Santinelli

Further education colleges' future credibility will depend partly on the speed with which they adapt to information technology, and one of its major components, computer literacy, the report published this week.

The report is based on a two-year curriculum research project funded by the FEU and centred at Gloucestershire College of Arts and Technology. The work was done in conjunction with a group of three FEU experimental colleges together with a further group of 10 colleges who

of the colleges who helped to test the material generally confirms that computer literacy can be regarded as an everyday skill, and not an expert practice, available to everyone.

"Like all skills, it decays if it is not taught and learned thoroughly, and it is not practised and updated from time to time. The introduction of computer literacy in schools, therefore, does not involve the FE system from responsibility for the further development of this skill for young people and adults," the report says.

Among the report's findings are that computer literacy enhances both the students' potential for further education and their employment opportunities, particularly in small businesses where there is a need for the possession of a wide range of microcomputing and other skills.

On staffing, the report stresses that

computer literacy teaching staff do not need to be computer specialists but ideally should be teachers with skills in other areas to which computer literacy can be related.

"Computer literacy is for all. The consequence of this is that computer literacy teachers will be required in large numbers. It should be noted that the subject is very demanding on teaching skills, and therefore the FE system should think about rewarding these teachers appropriately," the report says.

Computer Literacy - Part I - A Manager's Guide by Jo Lloyd, Janet Taylor and Chris West of Gloucestershire College of Arts and Technology, available from the Publications Department, Department of Education and Science, 100 Whitehall, London WC1N 3LE. Stalmore, Middlesex: HAI.

All-party campaign to defend ILEA

by Sandra Hempel

Further and higher education in London could be completely fragmented if new Government proposals on the future of the Inner London Education Authority become law, Mr Neil Fletcher, chairman of ILEA's further and higher education committee said this week.

Speaking at an all-party campaign launched by the authority this week to oppose the Government, Mr Fletcher said that the present close ties between ILEA members and the polytechnics in particular would be lost if the members were replaced by borough representatives whose only concern was for local services. "It would wreck the concept of higher education being a service for the whole of London," he said.

There would also be financial problems. The advanced further education review would be jeopardized because of uncertainty about the future level of

funding. The move towards greater access to further and higher education, particularly in relation to the University of London, would be threatened. "It could kill off everything that is happening in this area," Mr Fletcher said.

Labour, Conservative and SDP members have all warned of disastrous consequences for education in inner London if the Government's proposals became law.

The ILEA's leader, Mrs Frances Morrell, said that as the relationship between Labour, Conservatives and SDP at County Hall was not normally "one of cosy unanimity" it was all the more remarkable that the politicians had reached a communal view on the future of the authority.

Mrs Morrell was sharing a platform with Dr David Avery, Conservative deputy leader, and Mrs Anne Sofer, SDP member, before attending a special meeting of the ILEA education committee called to agree the author-

ity's official response to the Government.

Among the special guests at the meeting were members of the House of Lords, including Lord Beloff, professor emeritus of government and public administration at Oxford University; Lord Stewart, former secretary of state for education and science and Lord Swann, former vice-chancellor of Edinburgh University; members of the House of Commons, including Peter Shore, Stewart Holland and Peter Bottomley; and religious leaders including the Right Rev Ronald Bowley, Bishop of Southwark and the director of the London Central Mosque and Islamic Cultural Centre, Dr A. A. Mughram Al-Ghamdi.

The authority's official response to the Government is contained in a report by its education officer which makes out a case for a single administration for inner London education and points out constitutional and

financial disadvantages to the new plans.

"It is wrong for the Government to regard the authority as a toy that it can remodel from the vantage point of Whitehall," Mrs Morrell said.

A joint board responsible for education in inner London and comprising members of individual borough councils with no knowledge of education was terrifying, Dr Avery said. He predicted a "near paralysis" of the system. "I cannot imagine it," he said.

Mrs Anne Sofer said there were both financial and constitutional dangers in the proposals. "I have a firm belief in decentralization and these are the most centralizing measures that have been taken towards local government since local government had control of education," she said. It was particularly important in inner cities to have an education authority that was fully responsible for its electorate.

UGC's 28 questions attacked

by Olga Wojtas
Scottish Correspondent

The principal of Glasgow University, Sir Alwyn Williams, has attacked the University Grants Committee's questions on the future of the higher education system.

Speaking at a graduation ceremony, Sir Alwyn said only a few of the 28 questions would elicit replies which could be reliably weighted and compared.

The questions had been hailed as part of a more open strategy to give everyone a say. But some should have been left to experts with access to the right data, he said, and he predicted that many comments would "not be all that well informed".

The question about the nature of universities and the consequences of some of the Leverhulme proposals on higher education could only be "genuinely attempted after collaborative studies among institutions across the range of higher education".

Sir Alwyn warned that the UGC might well be overwhelmed by a "flood of unprocessed material" from a large number of bodies. In 1981, the UGC was reported to be under severe strain with an increasing workload being placed on a reduced staff. "Those days were studies in still life compared with what lies ahead," he said.

"The Department of Education and Science, which provides the staff for the UGC, must come to its senses and recognize, as did most universities when faced with the same problem, that cuts cannot be applied pro rata, but have to take account of the nature and burden of the work to be done.

"Unless the UGC administrations immediately strengthened, any good advice contained in the returns may well remain buried in the dross," Sir Alwyn said he could not anticipate Glasgow's reply to the UGC since this would not be considered until next term.

"We are not dawdling, but since this is the third inquiry in so many years to cast doubt on the university system as we know it, we panic less easily than we used to."

Every university would be tormented by as many anxieties as beset an examinee waiting for the pass list and for much the same reason, said Sir Alwyn. "To what extent will our past record of outstanding scholarship and research influence the present assessment? How much weight will our own answers carry compared with those representing institutions which may be at variance with hallowed educational aims?



Sir Douglas Hague, SSRC chairman.

SSRC must be money broker, says Hague

by Paul Flather

The Social Science Research Council would have to act much more as a "money broker" if it was to be able to fund new projects, Sir Douglas Hague, its chairman, said this week.

Sir Douglas was giving his first public speech at the annual general meeting of the Social Research Association. He remained optimistic about the future while making it clear there was little scope for funding unless it was found from new sources.

On this front he reported good progress without revealing any details. He said the council would be developing as a money broker, matching pound for pound what was raised from other sources such as industry, commerce, and local authorities.

Recent examples of this new style include the Franco-British agreement with each side putting up more than £1m for joint research and exchange schemes, and the agreement with Robert Maxwell, the publisher's millionaire, sharing £130,000 to rescue this year's general election survey.

The council has faced budget cuts of more than 30 per cent in real terms since 1979, and is currently trying to absorb a £6m spread between 1982 and 1985. Exacting commitments mean

there is little money for new projects and training awards.

Sir Douglas however drew attention to the recent assurance in a letter from Sir Keith Joseph, the Secretary of State for Education and Science, that the council would "not be torn up again by the roots" by a latter-day Rothschild-style inquiry for at least three years.

He went on to promise full council backing for new style American doctoral programmes with a first year taught methods course. This would mean choosing manageable theses that concentrated more on competence than originality, as at present required. Sir Douglas told his audience of 100 that a number of institutions had already responded to the idea and full proposals would be published early next year.

He went on to defend the system of allocating student awards by "open competition", which next year will apply to half of the council's awards on offer up from 30 per cent.

Sir Douglas described the shift as a "radical" change and said he was aware problems in the pattern and timing of funding could arise. He promised a thorough review after three years with reforms if needed.

'Open competition' awards plan challenged

A strong challenge to the SSRC's plans to allocate half next year's student awards by "open competition" was mounted at the conference by Mr Malcolm Cross, deputy director of the Ethnic Relations Research Unit at Aston University.

Mr Cross said the heavy emphasis on "open competition" would almost cer-

tainly mean that attempts to introduce the much-needed new style postgraduate degrees were almost certain to be "stillborn".

Mr Cross, who has chaired a training sub-committee of the Social Research Association, was speaking in a later session after the conference had heard Sir Douglas Hague, SSRC chairman,

promise full support for the US-style degrees.

The new style US degrees, which would provide methods training, would not be able to start with so few awards on offer from the council and he urged members to lobby for a drop in the number allocated by "open competition".

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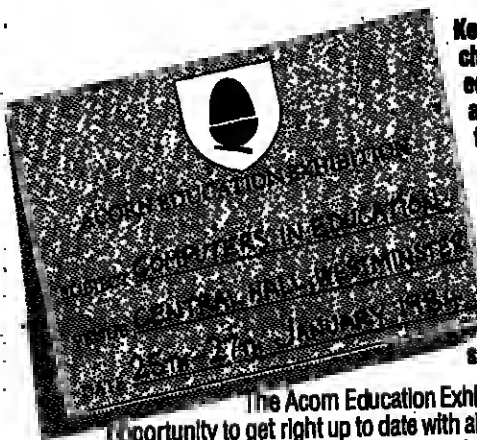
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news in brief



Keele v-c makes transfer to Exeter

Dr David Harrison, vice-chancellor of Keele University since 1979, is to become vice-chancellor of the University of Exeter, next October, when Dr Henry Kay retires.

Dr Harrison, aged 53, was educated at Bede School, Sunderland, and Clacton County High School. He took first class honours in part I and II of the natural sciences tripos at Cambridge University and became a research student and then assistant lecturer in chemical engineering. He has been a fellow of Selwyn College, Cambridge, since 1957 and was senior tutor from 1967-1979.

Chinese rocks

Agreement has been reached between the Scottish Academic Press Ltd and the China Geological Publishing House to publish in English *The Stratigraphy of China* in 14 volumes starting next year. The series on the geology of China is being compiled and written by over 150 geologists from 33 institutes in China.

Blind aids

New aids for blind people, including systems to help with reading and writing, have been launched by the Research Unit for the Blind at Brunel University. The unit has also produced an international survey of aids for the visually disabled.

General picture

Two college associations have opened a new joint national office based at Garnett College, Roehampton. It will gather a national picture of aspects of further and higher education for officers and members of the Association of College Principals and the Association of College Registrars and Administrators.

Earth moves

The University Grants Committee has given the go-ahead for a new £24m earth sciences building for London University's merging Bedford and Royal Holloway colleges at Egham, in Surrey. The money will come from the eventual sale of Bedford College.

One of TV's growth industries is Michael Heseltine. Demonstrations, CND marches, nuclear horror films and red paint stand a good chance of making him the leader's face apparent.

There is a lot more to the man than the hair and the oratory. He is the first - and only - Cabinet minister truly interested in improving management in government. He allowed the Department of the Environment by 26 per cent while extending its activities in the inner cities. The Ministry of Defence of course poses a more acute challenge, for it employs a million people and has a civil service component which is four times that of the DoE.

What is less known is his interest in ideas. The departments he has been in charge of are teeming places. He brings them with stimulating ideas and schemes, whether it is American-style matched funds for the cities, increased competition in defence contracting, or private sector secondment.

On a smaller scale, he has called for closer contact with the academic

Book survey reveals lack of knowledge

by David Jobbins

More than half of first year students have no prior idea how many books they will need or their cost, according to a survey of book buying.

Only 12 per cent knew fairly well how many were required, while 23 per cent had a rough idea, findings from the study commissioned by the Publishers Association and British Library, indicates.

Only 5 per cent had an exact idea of books needed, probably either from a college list or from a lecturer. Some had worked it out for themselves, according to the survey. A total of 39 per cent of first years bought books before going up to college - an average

of 1.9 books per student.

First year students also proved to be more prolific book buyers than their second and third year colleagues. A massive 99 per cent bought recommended titles and 32 per cent other books related to their fields of study compared with 94 per cent and 23 per cent for second year and 82 per cent and 24 per cent for final year students.

Overall, 92 per cent of students bought 7.4 books per head at an average cost of £5.34 per title. But 72 per cent will not buy at least one book recommended by their tutors.

Most (87 per cent) of the books were paperbacks, 16 per cent of them secondhand. Campus bookshops were the source of recommended titles for

39 per cent of students, with local bookshops a close runner-up at 34 per cent.

On average, students had spent £42.5 on books for the year up to April/May when the survey was done. This was made up of £39.5 on recommended and £3 on non-recommended but relevant books, almost exactly in line with the survey carried out by the National Union of Students which found an average of £42.96.

There was only a slight difference between university students, who spent an average £42.5 and polytechnic students who spent £43.1, but arts students spent substantially more (£47.8) than science and technology students (£37.3) or social science stu-

dents (£40.1).

Women students, therefore, had a much higher than average outlay (£47.6) than men (£38.7). Bookshops emerged from the survey with a five vote of confidence from students. They were considered helpful by 81 per cent of university and 75 per cent of polytechnic students.

A majority of students, 57 per cent, found the books they wanted in stock. The average waiting time for ordered titles was 3.2 weeks but 13 per cent had to wait more than five.

Student Book Buying, published by the University College and Professional Publishers Council of the Publishers Association, 19 Bedford Square, London WC1B 3HL.

'Unsuitable' graduates rejected

by Patricia Santinelli

Several universities and polytechnics appear to have jumped the gun by rejecting graduates for postgraduate education courses because their first degree was regarded as irrelevant for prospective teachers.

The Association of Graduate Careers Advisory Services says it is extremely concerned by the number of individual students coming forward. They claim they have not been accepted by institutions because their previous studies were not deemed suitable.

The AGCAS says that institutions seem to have overreacted. They have taken the Advisory Committee on the Supply and Education of Teachers recommendations to the Secretary of State for Education and Science as already accepted and also insisted that candidates for secondary postgraduate Certificates of Education should have a degree in their chosen teaching

subject.

In fact ACSET's advice only mentions two years of undergraduate studies in the chosen subject and not a full degree.

The association says that in one case a graduate in politics was turned down for a secondary postgraduate certificate of education on these grounds. Last year such a degree was regarded as perfectly acceptable.

It adds that there is also evidence that social scientists are finding it very hard to convince primary admission tutors that they did a relevant course. The first indication of the first subjects deemed suitable for primary teaching came in a DES document *Teaching in Primary Schools* this summer. This listed English, maths, science, history, geography, arts, music and religious studies as relevant.

The AGCAS says it has had confirmation from both Sir Keith Joseph, Secretary of State for Education, and from Mr Robert Dunn, junior educa-

tion minister that although the restrictions were reasonable, they had not been introduced and before they were a suitable period of notice would be applied.

Moreover when the Earl of Swinton replied to a parliamentary question put by Baroness David, the Labour spokeswoman on education in the House of Lords last week, he confirmed that the Government had not yet made its views public on the matter. He added that as yet no particular degree subject had been singled out as being suitable or unsuitable for intending teachers.

The AGCAS now plans to send a circular to all heads of careers services in institutions both to bring them up to date and encourage them to take up individual cases.

It hopes that other departments will be supportive because the restrictions are bound to affect many of their students intending to become teachers.

Cambridge recoups overseas student losses

More overseas students are now at Cambridge University than at anytime in the last 10 years and the trend is upwards despite the full-cost fees they now have to pay.

Figures just released by the university illustrate the Cambridge success story, with 1,037 overseas and 149 EEC students accepted for entry in October. This compares with the 1,061 overseas students taken by Cambridge 10 years ago.

The table below shows how overseas student numbers declined steadily between 1973 and 1980/81, the year full-cost fees were introduced for all non-EEC foreign students. After that, numbers dipped further to an all-time low around 1981 which amounted to about 6 per cent of the total Cambridge student population.

By then Cambridge had drawn up plans for worldwide efforts to raise fresh funds to attract and support able foreign students despite the higher fees, as well as to publicize the merits of the university.

Senior Cambridge dons were dispatched round the world to tie up agreements with government heads and industrial magnates. The commit-

Overseas students at Cambridge University	Total	% of student total
1973/74	1,061	9.85
1974/75	1,121	10.34
1975/76	994	9.18
1976/77	968	8.80
1977/78	959	8.89
1978/79	907	8.74
1979/80	876	8.60
1980/81	799 (930)	8.98 (8.10)
1981/82	779 (935)	8.88 (8.02)
1982/83	882 (976)	9.22 (8.53)
1983/84	1,037 (1,186)	9.90 (10.18)

Note: Numbers in brackets are EEC students reclassified because they pay home rate fees.

Source: *University Reporter* p.179, November 30 1983.

tee on awards widened its horizons, the Cambridge Commonwealth Trust, the Cambridge Livingstone Trust, the Friends of Cambridge in Hongkong all blossomed.

The university is still pursuing new arrangements with countries like

Kenya, Ghana and Nigeria, but it remains unhappy with the money raised in Australia and Canada so far. Even so this year 242 overseas students at Cambridge were supported under the various schemes.

Commonwealth schemes backed 31 graduate and 33 undergraduate foreign students, 12 graduates were supported from China, a further six from South Africa and 137 graduates and one undergraduate received bursaries of some form. Before 1980 very few foreign students received support.

The university is naturally well satisfied with the trend which contrasts sharply with numbers attracted by most other universities. An official said: "We always thought we could continue to attract the very able students. But as these figures show we have not only retained our numbers but greatly increased them and we are very pleased."

The trend for overseas student entry to all universities also looks brighter. Latest figures from the Universities Central Council on Admissions show a 27 per cent increase in overseas student applications.

Grant aids Fellowship ambition

by Jon Turney
Science Correspondent

The Fellowship of Engineering will receive a Government grant next year, marking an important step towards its ambition to become the engineering equivalent of the Royal Society.

The Fellowship, founded in 1936, received a number of small grants to work in education and training from the Science and Engineering Research Council this year. But it will now be given a separate grant-in-aid under the Department of Education and Science's science vote. The new grant, to be announced with the rest of the science budget at the end of the month, is expected to start at around £150,000 a year.

This compares with the £5m a year the Royal Society receives from the same source - but the Society did have a 300-year start. Administratively, the grant puts the Fellowship on the same footing as the Society, as an independent advisory group with government support.

The money will help the Fellowship expand to fill the whole of its London premises, where it has just taken over space vacated by the now defunct Council of Engineering Institutions. The Fellowship now has over 300 members, elected by ballot in the same way as fellows of the Royal Society.

It is developing a role as an advisor on engineering matters to Government and industry. Current working groups of the Fellowship include studies on education and training for engineers and the need for a national technology policy. Both are expected to report next year.

Fellowship officials stress that these activities will be developed to be complementary to the Engineering Council, also partly government-funded, and not in competition with the Council. Viscount Caldecote, the Fellowship's president, was a founder member of the Engineering Council, and the Council's director-general, Dr Kenneth Miller, is a member the Fellowship.

PARTY LINE

More to Michael than hair and oratory

world. He has just established forty-nightly lunches at which a couple of people from the ministry and three or four from industry and the universities can kick around anything they like with him, as the mood takes them.

When I started looking around for willing guests to attend these lunches, I was struck by how good war has been for academics. One of the fastest growth areas of higher education has been 'war/defence' studies. Not that the growth is just obvious. The old lecturer keeps popping up in politics, defence, international relations and economics departments as well as specialist centres, institutes and departments of war studies. There are also those specialising in 'current strategy and more in his

theory or related fields like terrorism or peace.

The problem about labels such as 'peace studies' is that they suggest results that are somewhat preordained: Bradford's centre of peace studies is a noted radical department, but is it too radical to be absolutely fair, some might ask.

Anyway, peace is popular: something called peace education is now being pushed on to our secondary schools in some counties. I have just read proposals for working parties in Lancashire and Nottinghamshire.

I am not very much clearer as to what is meant by peace education. Some of Nottingham's curricula ideas involve 'a study of the Brundage report', 'examining with a town in the United States', and of course

pupils should be "encouraged to role play situations of significance to peaceful coexistence". Studying the UN Declaration of Human Rights and "its practical application within the school" might have disastrous consequences for Nottingham schools. Then one wonders just what objectively the authors had in mind when they called for "a study of the case for peace based upon a balance of military power"? Why, I wonder, should peace studies include the treatment of offenders? Well, the Lancashire paper gives us the answer: peace - which, supposedly, the exercise is intended to promote - nevertheless may conceal, so it argues, 'great injustices of what is sometimes referred to as latent violence'. So obviously teachers should go beyond 'educat-

tion for disarmament" to consider those 'social problems that lead to violence', such as football crowds and the situation in Northern Ireland. Ultimately, Lancashire's aim is "to develop an understanding of the interdependence of individuals".

Wonderful though that is, my first reaction was thank goodness we are still a long way off a centralized system in which left-wingers like Mrs Joan Farrington, who chairs Lancashire's education committee, can impose their view on the curriculum. But then I realized that the good sense of most teachers will prevail but these documents are not so much sinister as stupid. More's the pity that so much time and money has to be diverted into efforts which clearly warrant the Golden Bull Award for gobbledegook.

Keith Hampson

The author is Conservative MP for Leeds North West

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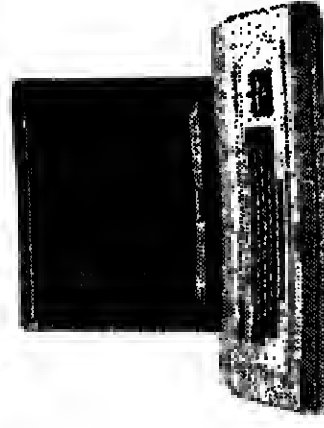
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CLASSIFIED ADVERTISEMENTS

Miscellaneous

EDUCATION DEPARTMENT

Technical and Vocational Education

The Chyd Authority is currently running one of the fourteen original TVEI Projects in live of its secondary schools and the Project will be linked with a Technical/Vocational Centre from September 1984.

The Education Committee has now approved a further development of TVEI-type curricula in a further eighteen secondary schools with effect from September 1984. These secondary schools will be organized for this purpose in a variety of arrangements (consortia, trios, "mushrooms", etc.).

The Technical Vocational Centre at Bodelwyddan and the eighteen schools will be seeking to recruit additional well-qualified staff in the following fields for September 1984, some posts being available at Senior Teacher Scale, others at Scales 4 and 3.

The specialist fields involved are:-

**COMPUTING
BUSINESS STUDIES
MICRO-ELECTRONICS
DESIGN, CRAFT, TECHNOLOGY
BUSINESS AND INFORMATION
GRAPHICS**

The vacancies will occur at various locations including Wrexham, Mold/Buckley/Dasid, Denbigh, Colwyn Bay and Bodelwyddan itself.

Teachers who have specialist qualifications in the fields listed above and who would be interested in this "second phase" development consequent upon the TVE initiative are invited to write in the underlined enclosure a full curriculum vitae as soon as possible but in any event by 21st DECEMBER, 1983. Further details will then be sent to the interested candidates as they become available.

(Please use the reference TVEI/AF in any correspondence).

JOHN HOWARD DAVIES
Director of Education
Shire Hall, Mold

(18388)

GLWYD COUNTY COUNCIL

British Museum (Natural History)

Educational Technologist

...to be responsible for the educational effectiveness of the Museum's exhibitions and the materials provided for Museum visitors (particularly school groups). This will include advising on the design and objectives of exhibitions and on selecting methods of achieving the aims and objectives of exhibitions and on structuring and presenting exhibition materials; advising on developing practical guidelines from soundly based theory for the design of the Museum's exhibition and management; and responsibility for the Museum's evaluation officer.

Candidates need to be creative, capable of using initiative and able to work effectively in a team. They must have proven interest and experience in the design of educational materials and should normally have an appropriate scientific background, preferably with an honours degree.

Salary: £11,225-£12,765. Starting salary may be set at the minimum. For further details and an application form (to be returned by 6 January 1984), write to Civil Service Commission, Alconbury Lane, Sandhurst, Hants, RG21 1PB or telephone 01344 (0256) 68551 (answering service operates outside office hours). Please quote ref G6433.

Courses continued

University of Bradford

Postgraduate School of Studies in Social Analysis

The School of Studies in Social Analysis offers two one-year full-time or two-year part-time taught courses leading to a MA degree in Social Analysis. The MA degree is awarded by the University of Bradford.

A MA in the Sociology of Industrial Societies. In addition there is a one-year full-time or two-year part-time taught course leading to a MA degree in the Sociology of Mass Media.

Students who achieve a high level of performance may be awarded a scholarship for the MA degree.

Full details and application forms can be obtained from the Registrar, School of Studies in Social Analysis, University of Bradford, West Yorkshire, BD7 1AT.

PLEASE SEE FURTHER CLASSIFIED ADVERTISEMENTS ON PAGES 26-31

Bid to block extra head office staff

by David Jobbins

An attempt to block moves to build up the head office staff of the university lecturers' union rather than employ more regional officials will come to a head next week.

A plan to add a fourth assistant general secretary to the Association of University Teachers and endorsed by the union's executive, is to be opposed by members who feel that priority should continue to be given to regional staff.

They will argue that a paper setting out the majority executive view should be remitted when it comes up for approval at the AUT's winter council meeting in Hull next week to allow fuller consultation with the membership.

Dr Joe Taylor, of the minority on the executive who argued against the proposals, said: "It might be argued that the AUT has proven their worth and would like to see the AUT restructuring itself on a regional pattern. Certainly we should not entrench the centralized approach at this stage."

"I think that if we decide to appoint another headquarters official we will not be appointing any further regional officials. We would be glad to be told I am wrong but I suspect this will be the case."

There are three pressures in support of extra headquarters staff. First there are growing demands by sectional groups within the union research staff, librarians, administrators and women among others.

Second, as outlined in a paper presented to the executive, Government policies are expected to mean

stricter controls on higher education in the future and an AUT response "will inevitably have to come from the centre".

The paper adds: "Resources at headquarters are already stretched and much work is already having to be put on one side."

Third, the AUT's membership is falling. It dropped by 8 per cent during 1982/83, greater than had been anticipated, and a further fall of 7 per cent for the current period has been assumed for budget purposes.

Although there was a £60,000 surplus in 1982/83 this may turn into a £80,000 deficit for the current year, which the AUT aims to meet from reserves. But union leaders are to argue for a subscription increase of 20 per cent for next year at the union's May council.

Against this background of declining income an extra official whether at head office or in the regions would cost £30,000 or an extra 5 per cent increase in subscriptions.

The executive's conclusion was that a system of regional officials would cost far more than expanding headquarters services.

A regional structure has significant support among AUT activists. A resolution demanding fully-coated proposals was referred back to the executive last May so that a review of workloads could be carried out. How far council delegates are convinced by the competing claims will be tested next week.

The AUT has appointed three regional officials - the first in the north-west, and others in Edinburgh and London.

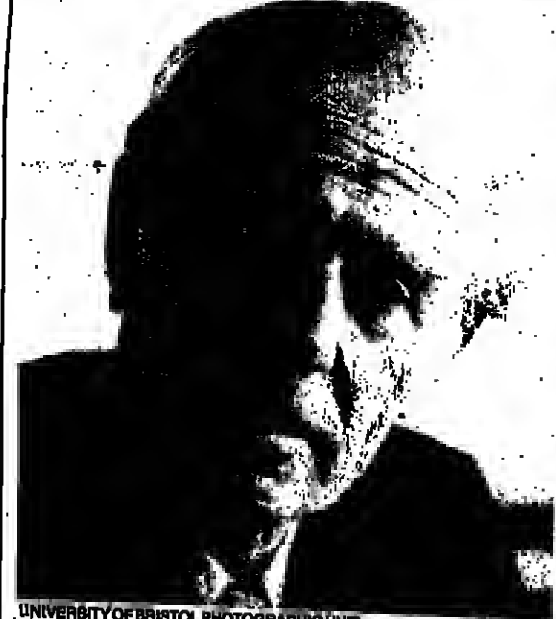
The University of Bristol's drama department will tonight honour

Professor Glynn Wickham, who was head of department from 1955 until his early retirement in

1982. The Vandika Theatre, which since it opened in 1968 has been used for teaching practical

theatre skills and for presenting work by the department and visiting

companies, is to be renamed the Glynn Wickham Studio Theatre.



UNIVERSITY OF BRISTOL PHOTOGRAPHIC UNIT

Tribunal finds discrimination

by Olga Wojtas

Scottish correspondent

Lothian regional council was guilty of sex discrimination when it did not call a female lecturer for interview for a promoted post at West Lothian College of Further Education.

This was the finding of an industrial tribunal in a case brought by Mrs Phyllis Hay, formerly a staff member at West Lothian College, and now a senior lecturer at Reid College in Paisley.

Mrs Hay said she applied for the senior lecturer post in business studies, but received no acknowledgement. She was later invited to apply again since the post was being advertised, but was not called for interview. The post went to a male colleague, and when Mrs Hay asked why she had not been interviewed, she was told she did not have the necessary qualifications.

Mr Harry Forrie, principal of West Lothian College, told the tribunal that the successful candidate had "absolutely excellent industrial experience" while Mrs Hay had worked mostly on the secretarial side. It was common for an applicant known to the appointments committee not to be called for interview, he argued, and Mrs Hay's application had always been considered.

The successful candidate, also a lecturer in the college, had been interviewed because he had spent some time working outside the college, while Mrs Hay had been there continuously.

However, Lothian admitted that Mrs Hay had eight years experience compared with her male colleague's three, and that she had undergone teacher training while he had not.

The tribunal found that the head of business studies apparently had surprisingly limited knowledge of Mrs Hay's qualifications, and abilities, and ordered Lothian to pay £100 compensation for her injured feelings.

Edinburgh hits graduate jackpot

Edinburgh University has reached its target of £400,000 in donations from former graduates. The General Council of the university, which began its appeal in 1979, has now raised over £400,000. The university's principal, Dr John Birt, described as an "invaluable asset" to the university, said: "There have been appeals on a

limited basis, he said, but to have a continuing appeal was "something quite new". Dr Birt said he hoped the appeal would bring the university £100,000 annually.

The university now has a computerized register of over 60,000 former graduates, 2,400 of whom contributed to the present appeal.

Frank Griffiths

The author is chair of the higher education standing committee of the National Association of Teachers in Further and Higher Education.



The realities of quality and quantity

What a fine old mess the Council for National Academic Awards have put themselves into. First there was the clear and categorical pledge in March this year that they would not "rank" courses in some kind of quality listing. Next there came the August silly season when, in a language decipherable by friends and enemies alike, certain courses in certain institutions were described in words like "sound" or "satisfactory" and within academia all sorts of knowing "nods" and "winks" were exchanged.

And finally there was the awful saga of town planning courses, when at the end of the day the Council gave in and supplied the National Advisory Body with three groups of courses, each distinguishable on grounds of supposed quality. The fact that in the same paper which contained these ranks there also appeared a request for a "full triennial review" and hence a year's deferment, only compounds the basic error. The blunt truth is that had the council thrown its academic weight into that aspect of the NAB planning exercise, and thus embraced the

totality of provision, it would have secured support from the National Association of Teachers in Further and Higher Education and from other bodies within the NAB.

However, while the CNA response sold its own pass and effectively buried the possibility of a broader review of planning courses, there may still be time for a proper debate on quality to begin.

Thus if the CNA and others are to engage in deliberations about the relative quality of courses then we need at the very least to initiate a discussion on what precisely is involved in such an exercise.

Also the weighting attached to the various criteria is far from clear. Thus how does "known potential for future development" relate to "support for the course by the polytechnic"? Also on what does the CNA operate, and is the periodicity of institutional course visits is such that questions of datedness might well arise.

Again it is not clear just how the CNA can deal with the theory issue of vested interests, which what courses are at risk of being closed because the NAB has requested the identities of the weakest, becomes much more than an ethical issue.

And finally there is the "quantity versus quality" debate, which in the proceedings of the NAB led to some of the confusion around the town planning exercise. It is difficult to conceive of a more dangerously sterile dispute, between those who on the one hand would submit a course for closure and adduce in support selected quantitative data, and those who would move from a position of known minimal quality about all courses to one where again, to paraphrase Orwell, some are "better quality than others."

The basic truth is that in the real world these two dimensions are inextricably linked, and are part of a environment of inter-dependence. Until all the complex issues which necessarily must permeate the NAB's work are thoroughly aired and debated, then the rancour which greeted the results of the town planning review will continue to be evident.

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Irish consider loans scheme

from John Walshe

DUBLIN

The Irish government is giving serious consideration to the introduction of a student loans scheme, coupled with massive increases in tuition fees for all third level students.

The loans idea is one of a number of measures being looked at by the government which is faced with an ever-increasing demand for higher education places.

Some details of the government's plans have been disclosed in a daily newspaper which published the main proposals contained in a forthcoming four-year Action Programme, prepared by education minister Mrs Gemma Hussey. Other measures include

study of the feasibility of a four-term academic year, reduction of staff student contact hours in some colleges where the teaching class load is as high as 30 hours per week, rationalization of some courses and an investigation into the possibility of reducing some four-year courses to three years.

The leaked plan confirms the government's intention to give greater emphasis to primary education and especially to disadvantaged children.

At the same time it says the government is committed to maintaining the present participation rate - 20 per cent of the relevant age group - in higher

education. But to do this would involve the creation of 40 per cent additional student places by the end of the decade because of the age bulge in the Irish population structure.

Trying to achieve the programme's objectives will involve the actual reduction in the incremental cost of higher education places. The proposal for loans is one way of achieving this - assuming the commercial banks in higher education, already low by European standards, if she does take any other measures she is proposing she faces a storm of criticism from students and staff alike.

The intention, apparently, is to reduce the state commitment to institutions of higher education and

make students not in receipt of state aid (only a third get aid at present) pay higher fees.

At present tuition fees account for about 17 per cent of the income of the universities. Individual fees work out at anything from IR£400 to IR£1,000 and there are fears that these could be doubled in the next academic year. Fees in technical colleges are much lower and the percentage increase these students face could be much greater.

The minister has confirmed that she hopes to be in a position to make a definite decision early next year about the loans and the other measures but already opposition is building up.

The Union of Students in Ireland has been galvanized into action and has promised a vigorous campaign against loans. The main political opposition party Fianna Fail has stated that it would be wary of introducing a loans scheme at a time of increasing graduate unemployment.

But the minister is in a dilemma. If she does not take some drastic measures the government may not be able to maintain existing participation rates in higher education, already low by European standards, if she does take any other measures she is proposing she faces a storm of criticism from students and staff alike.

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Mrs Hussey: in a dilemma

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overseas news

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Main speakers miss Stockholm conference

The sixth international conference on collective phenomena which took place in Stockholm last week had a most surprising feature. None of the four principal participants could deliver his paper in person.

This was not surprising. The four Russian scientists, Dr Viktor Brailovsky, Professor Yakov Alpert, Professor Aleksander Lerner and Professor Naum Meinan, are all *refuseniks* - Jews who have been deprived of their scientific posts after applying to emigrate to Israel. They are not allowed to emigrate on the grounds of alleged former access to classified information.

This is the first conference in the series to take place outside the Soviet Union. The previous five have all been convened in Moscow by the *refuseniks* themselves.

The international conferences on collective phenomena arose almost by chance out of the weekly Sunday seminars which the *refuseniks* began

overseas news

'Working holidays' concern

Poland's scheme of "self-financing" holidays for students and school-leavers has been extended to cover term-time as well as the summer vacation. A group of young people who failed to gain a university place this year have gone to work in East Germany, with, apparently, some kind of understanding that this will virtually guarantee their admission to a Polish university next year.

Government-sponsored "working holidays" - with pocket money and travel expenses provided - are a familiar feature of student life throughout the socialist bloc, and provide a useful supplementary labour force for seasonal work such as fruit picking. Recently, however, party theorists in Poland have urged the political importance of tourism to such politically orthodox countries as the Soviet Union and East Germany.

Last month, a special plenary meeting of the Supreme Council of the Polish Students Association (ZSP) likewise stressed the "political aims" of student tourism, though this may not have been entirely disingenuous. A major practical issue of the meeting was the raising of funds for student tourism, and the ZSP leaders may have framed their remarks with one eye on possible Party subsidies.

The extension of the idea of working holidays to young people who hope to begin university studies in autumn 1984 has a certain logic. Many school-leavers were disappointed this year, owing to major cut backs in university admissions and the closure of courses - ostensibly for purely economic reasons but in some cases as a result of the political "verification" process introduced under martial law.

It is somewhat disturbing, however, that the scheme would be taking part in the "scheme" have received assurances of a place for next year. Unless they are planning to read German, or are carefully assigned jobs closely related to their proposed studies, it is difficult to see how a year spent working in Germany will necessarily bring them up to admission standard.

The academic community continues to press for university admission to be on the grounds of strict academic ability, while the government has several times pledged itself to give the current scheme by which selected young people from worker and peasant backgrounds receive additional bonus marks in their entrance examination. The idea that work experience in a socialist country should automatically improve an applicant's chances is unlikely to be accepted by the universities without protest.

Space contest

Oklahoma students are being invited to participate in a statewide competition to devise space experiments to be conducted on the space shuttle.

The competition is being conducted by the School of Mechanical and Aerospace Engineering at Oklahoma State University, headed by Craig Friedrich, who is also the technical, legal and safety liaison officer with the National Aeronautics and Space Administration. The winner will receive a \$1,000 scholarship and will be flown to the Kennedy Space Centre to watch his project launched.

Academics call for new Australian grants scheme

from Geoff Maslen

MELBOURNE A group of Australia's top educationists have called on the Commonwealth government to set up an Australian educational research grants scheme, similar to those operating at the national level for other areas of applied research.

In a submission to the federal minister for education and youth affairs, Senator Ryan, the group says such a scheme would not only meet a serious and widely recognized need, but would also have the capacity to provide help to improve the quality of Australian education and to deal with current and future educational problems.

The submission says the scheme

French universities split over reforms

from David Dickson

PARIS A major struggle is taking place among university supporters of President Francois Mitterrand's Socialist government over whether substantial modifications should be made in its plan to reform French higher education.

A bill which describes the proposed changes, in particular the government's desire to broaden university entrance and to increase the professional orientation of university courses, was due to begin its second reading in the national assembly on December 8.

This week six months after it was first passed against a background of violent protests in Paris and three weeks after its major provisions had been rejected by the opposition-dominated senate.

This rejection had been widely anticipated, given the criticism which the government's plan had generated not only in conservative political circles, but also among certain categories of university teachers. In particular lecturers in the fields of law and economics fear that the effect of broadening the entry to universities will be to reduce the quality of the education that they will be able to offer

and hence the status of their graduates.

More troubling for the government, however, has been growing opposition from a number of leading university teachers and research workers in other disciplines. Although they claim to be in general support of its left-wing policies, they nevertheless argue against some of its plans for reforms in the administrative structure of universities.

This is on the grounds that they would give too much power to non-teaching staff and place too much emphasis on the provision of practical courses, to the possible detriment of the broader cultural and scientific roles that higher education is expected to play.

Such fears were expressed in a letter sent directly to President Mitterrand by 55 senior university academics, including three Nobel prize winners and 27 members of the Academy of Sciences.

This letter endorsed some of the principles on which the government's proposed changes are based, such as the need to ensure that university places are available to all those able to benefit from them. But it warned that some of these specific recommendations could lead to "a profound and

irremediable degradation of the university".

Signatories to the letter included a wide range of prominent French intellectuals, such as the historians Georges Duby and Jacques Ellul, mathematicians Laurent Schwartz and Rene Thom, the anthropologist Claude Lévi-Strauss, and the sociologist Alain Touraine.

Fearful that the government might be tempted to react favourably to some of these criticisms, perhaps even through the personal intervention of President Mitterrand himself, the supporters of the reform have organized a counter attack designed to persuade the national assembly to reject the amendments to the original Bill which were approved by the senate.

Last week, 1,500 individual members of one of the main university teaching unions, the Syndicat National de l'Enseignement Supérieur, signed a full-page advertisement in the Paris newspaper *Le Monde* also directed to President Mitterrand.

Further support for the government's reform in their original version came from a separate appeal from 40 of the 74 presidents of French universities, including Madame Mounique Lafon-Auge, president of the Uni-

versity of Paris-XII and the senior vice president of the conference of university presidents.

The presidents argue that as currently organized the different types of institute that make up the higher education sector are too isolated from each other, and support the government's proposals for greater collaboration.

M. Alain Savary, the minister of national education, has already made concessions to critics of his reforms by supporting an amendment to the original Bill increasing the proportion of senior faculty members on the university councils responsible for academic policy. He has also suggested that minority disciplines should be ensured a seat on university administrative councils but has refused to argue that there should be greater selection of university entrance.

So far, M. Savary has managed to persuade Socialist deputies in the national assembly that the government does not intend to make any further modifications to its proposals, despite the intensity of the criticism that it is currently facing. If necessary it will use its full statutory powers to ensure that the law comes into effect.

'Global plan needed'

from Mark Gerson

MONTREAL A global development plan is needed to heal the ravages wrought by the technological revolution, Jean-Jacques Servan-Schreiber told 750 representatives in education, labour, business and government in Ottawa last month.

Servan-Schreiber, who is president of the World Centre for Information and Human Resources, was addressing the Canada-Toronto conference, organized by the federal government to examine the implications of Canada of the new technology. "The new plan will not be a financial plan, but a plan with a transfer of knowledge, of learning, of training and of the ability to create," said Servan-Schreiber.

Cooperation in the areas of agriculture, education and health alone could mean that "no part of the world would lack food, education or the means to deal with health problems," he said. He called on universities, laboratories and research centres around the world to work together toward the same kind of global rebirth the Marshall plan kindled 40 years ago.

"Today our task is 100 times greater than that of the Marshall plan," said Servan-Schreiber, "since we are no longer dealing only with industrialized countries, but with the whole world."

After the last war the United States initiated the rebuilding of Europe and Japan through the Marshall plan. But today, the US is as badly hurt by the rest of the world as a good job. The "shark of the computer revolution" has rendered plant and factories obsolete in the space of a few months, he said. "It has forced tens of millions of men and women out of the unemployment line into the unemployment line."

In the "so-called rich countries" of the Organization for Economic Cooperation and Development, there are now 36 billion unemployed, with a further five billion jobs expected by 1985. The impact on third world countries has been even more disastrous, he said.

"We are all at the same level, and thus the importance of this crusade for knowledge and scientific learning for all men, regardless of continent or culture. The same priorities apply to north and south, to east and west."

The new Greek

Professor John Algeo, professor of English at the University of Georgia at Athens, has surveyed the what kind of 1,500 students to find out what the "new Greek" is spoken on the Athens campus - and discovers that it may be "a kind of 'bungee' or 'mash' of the old and the new" (a college athlete, often professional in all but name).

Getting its sums wrong

The Youth Training Scheme has been unable to fill thousands of its places. Patricia Santinelli asks why and how it managed to get its figures wrong

One of the most disturbing questions about the Youth Training Scheme, particularly in the last month, has been the mystery of thousands of young people who have apparently disappeared. This has resulted in a shortfall of filled places and bitter charges as to where the blame lay for the heavy financial losses incurred. At first the culprit was deemed to be an increase to those entering further education. But Department of Education and Science figures were soon shown that this was not the case.

Part of the mystery has since been explained by a welcome rise in youth employment. Department of Employment figures issued last week show that 65 per cent more young people than expected obtained jobs between May and October. In areas like Hertfordshire this was as high as 30 per cent.

There are also indications that the Youth Training Scheme is competing with the YTS. This is certainly the case in Birmingham and Bedfordshire but the Manpower Services Commission claims it is more widespread. It wants the YTS to follow the YTS and not compete with it.

This still leaves a large number of youngsters who some suspect are simply staying at home because they are disillusioned and depressed by their lack of prospects, particularly in areas of high unemployment. Other say these young people never existed in the first place and a gross miscalculation was perpetrated.

The MSC is now claiming in a rather aggressive defence that it is as pure as the driven snow. It says it worked on the figures given by careers officers in local authorities in good faith and therefore the blame lay there and with the colleges for being too inflexible. It did not mention that in some cases another 15 per cent had been added to these figures. The commission is now speculating to have not more than 20,000 young people in total on the scheme this year - a shortfall of 10,000 and a 2.5 per cent overestimation on the original numbers.

The commission's attack has been strongly refuted by the Association of County Councils which last week pointed out that estimating levels of youth unemployment was the task of the MSC's forecasters. The careers service could only indicate what jobs were likely to exist in their own localities for leavers and could not be expected to forecast any improvement of the economy.

Likewise the Association of Principals of Colleges rose to the defence of its institutions and rejected the MSC's claims that they lacked flexibility and were therefore not getting YTS work.

The APC is very supportive of YTS work and stresses that colleges will do everything to make it a success. But it says that it has been difficult for institutions to turn round and act like commercial enterprises overnight. It believes that the colleges should have been given a bigger role in the YTS by the MSC because as professionals they had been doing a good job.

What is puzzling however is that the MSC appears to be quite prepared, as revealed by the Youth Training Board report, to accept other estimates that there will be as many as 450,000 young people waiting a place on the 1984 YTS return to the original estimate. Whether these include the careers service is not mentioned.

The Youth Opportunities Programme was a temporary measure but the Youth Training Scheme is intended as a permanent programme under which school-leavers and some others are offered a year's training. It is meant to serve as a bridge from school to work and to widen youngsters' opportunities, as well as develop them into more flexible work force.

Under the one-year programme, young people are offered a mixture of education, training and work experience. Training is intended to be both on and off the job. All 16-year-old school-leavers, whether employed or unemployed, are eligible for the scheme, including some 11-year-olds and disabled people up to 21.

Originally the MSC intended the scheme to provide for 400,000 people. By November there were around 270,000. The figure, however, being in Wales and London. Each youngster receives £25 a week. Any youngster deemed to have refused or left a place on the YTS for what is regarded as an "insufficient reason" is liable to lose his or her unemployment benefits (as well as his or her £25 a week) for an examination "period" (a college athlete, often professional in all but name).

Perhaps what the MSC ought to be doing is questioning why its information is incorrect. There are currently some six projects investigating different aspects of the YTS, some of which are actually funded by the commission. Yet none of these are coordinated, except on an ad hoc basis by the different groups carrying them out. Most of their reports will not be available until well after the MSC and ministers have taken a decision in January on next year's scheme.

Current knowledge of the national scene is extremely patchy and confused - as shown by two contrasting conclusions on where colleges stand.

For example Mr Clive Seale, a solo researcher based at Garnett College, has figures based on a 61 per cent return or 282 further education colleges. Mode A represents 75 per cent of college work, Mode B 14 per cent and Mode B1 10 per cent.

The APC's overall impression is that most colleges appear to be concerned with running Mode B courses. But both in south and north-east England there certainly seem to be colleges engaged in both types of work.

Similarly, in 11 areas - Bedfordshire, Buckinghamshire, Birmingham, Cleveland, Devon, Gloucestershire, Hertfordshire, Inner London, Liverpool, Leicestershire and Surrey, the *THES* found that provision for both did exist in colleges. But the proportions varied enormously from one area to another and within each locality.

In Birmingham, the local area manpower board decided on a high proportion of Mode A training - little of which is in colleges - and on which there is a substantial shortfall, whilst the authority's Mode B provision has been confined to adult training centres rather than to the colleges.

Devon, like Birmingham, is suffering from a substantial shortfall on Mode A training but this seems to have mainly affected its colleges. However Birmingham is doing well running Mode B courses, with a high proportion of Mode B work and have only just started recruiting their Mode A trainees. The inner London colleges have about 49 per cent of all off-the-job training and claim that MSC officers are stilling the approval of more Mode B schemes.

Liverpool was given an equal proportion of training on all modes, and colleges are roughly covering 50 per cent Mode A and 50 per cent Mode B. Gloucestershire is also doing an equal proportion of Mode A and B work but says that although the number on off-the-job training in colleges is adequate it is not as high as expected.

The Further Education Unit, one of the bodies involved in a YTS survey, says a consistent pattern is lacking because schemes have been negotiated locally and this has resulted in various interpretations of the rules. Certain colleges have been given the work in one locality and not in another, with no apparent reason.

This is a view shared by the APC which says that some colleges are doing better than others. But there is no explanation as to why there were such differences in colleges only a few miles apart.

For example, it points out that in the south-east of England the balance of provision is still altering because colleges are getting more requests for off-the-job training. This is creating problems in getting trainees on to supplementary benefits.

There are three types of schemes. Mode A schemes are described as largely employer based. Places on this scheme are provided by both public and private employers, local authorities, voluntary agencies and in some cases colleges acting as manning agents rather than off-the-job trainers.

There are two grades of Mode B scheme and they are organized by the MSC using its own facilities or involving sponsors. These are designed to provide high quality training. The MSC either manages or sub-contracts the year-long programme.

Under Mode B1, schemes are run through training workshops, community projects. Under Mode B2 schemes are organized by colleges, training associations, employers and others.

The MSC has £950m to spend on the YTS this year. This goes up to £1,100m in 1984/85. At local level delivery of the scheme is the responsibility of 54 area manpower boards. The Youth Training Board is responsible for overseeing the YTS at national level.

college courses which have already started. As a result, colleges might be forced to turn down managing agents and advise them that there are no appropriate courses.

It would seem that the MSC owes providers and others some clarification of the national picture, especially as this is already being complicated by a sudden rise in recruitment and is about to be further confused by Christmas school-leavers.

For example, it is necessary to take a clear look at the shortfall, the resulting financial difficulties and the extra demands for finance. These have been generated by fewer young people on Mode A, of which Devon is the cause célèbre, and Mode B2 which several colleges are having to subsidize regardless of any shortfall, by several counties.

In addition there are freshly-brewed issues like compulsion to join the scheme through cuts in benefits, the limited length of the 13-week off-the-job training period which worries many areas and the substantial rise of private trainers in certain places.

The case of Devon, and in particular Exeter College which stands to go bankrupt, has highlighted the results of the shortfall which led to fewer youngsters being sent to colleges for off-the-job training.

Its case, Oxfordshire which is similarly placed, as well as other local authorities was being discussed by the ACC last Thursday. While further funding for colleges is the topic of discussion at a meeting of a Youth Training Board special working party today.

Devon's agreement, which is similar to others, is for Mode A. One third of the cost would be met by the local education authority on the assumption that young people normally coming forward for traditional further education courses would go on to the YTS instead. And there would be a resultant saving of some 30 per cent.

In fact this has not happened because there has been an increase in numbers going into further education concurrent with the shortfall and it has been impossible to redeploy resources. Exeter College in particular has been caught in this because it has to meet a demand for £90,000 - half of the total sum being demanded by the county from its colleges to meet a deficit on the YTS. This came on top of a £172,000 out already forced on to the college this year.

The authority has refused to pay the deficit itself because of the likelihood of incurring Government penalties for overspending. A special education committee meeting took place early this week to decide what can be done about next year's scheme. The county estimates that it would have to subsidize Mode A training to the tune of £400,000.

Devon says that when its colleges are sub-contracted as managing agents on Mode A they can cover the costs but cannot do so when they are operating as providers of off-the-job training. The county intends to continue with Mode B provision on which it has sufficient numbers, even though it has to subsidize the scheme to a small extent.

In addition there is evidence from both the south-east and north-east of England that colleges are being used by employers and managing agents to supply the more expensive provision.



On the ball: A girl and four boys are at Luton Town Football Club under the Youth Training Scheme.

For example they provide computing and catering courses rather than the less expensive life and social skills and clerical courses.

Under present regulations young people who refuse a place on the YTS for a reason deemed "not sufficient" stand to lose their unemployment benefit for six weeks and 30 per cent of their supplementary benefits. This is the same as for adults who refuse a job.

A Department of Employment circular on the Youth Training Scheme is currently going the rounds asking that careers officers, job centres and employment offices report cases of YTS refusals.

The ACC says that pressure has already been put on careers officers in certain areas to disclose cases. This is putting the officers in an untenable position as well as endangering the future credibility of the YTS, it claims.

The rise of private trainers has become an issue in Birmingham and to a certain extent in the ILEA. This is because of the possible ephemeral nature of the companies and the doubtful quality of their offerings.

In Birmingham it appears that private trainers have cornered some 5,315 of the 9,442 places allocated to Mode A training. This is about 56 per cent of all Mode A training and some 42.5 per cent of the total 12,340 places approved by the area manpower board.

In contrast employers have only been given 16 per cent of all Mode A training and 11 per cent of the total. Only 8,500 places covering all modes have been filled and there is a shortfall of some 3,000 places to the area.

The Natfhe in Birmingham is currently investigating the extent and role of private trainers on the YTS to the area, with the help of the Trades Union Resources Centre. It is particularly concerned about the quality of what is being offered by agencies which have not been in business very long.

Mr Paul Mackney, a Natfhe official in Birmingham said: "As a result of the shortfall, I expect some of these agencies to go bust, indeed some were in a poor state before they started. And what worries us is what is going to happen to the trainees and how they are going to be transferred on to other schemes."

The ILEA claims that its colleges have only achieved a 49 per cent success rate in the off-the-job training because they are in competition with Pitmans and Slight and Sound.

A report by the Greater London Training Board published in the autumn also shows concern about the extent of privatization and adds another name to the list, Control Data Institute. It points out that private training agencies are also moving into sections where statutory industrial training boards have been abolished by the Government.

The report adds that the experience of Central and Fife, an area manpower board in Scotland, which was overruled by the MSC in Sheffield, suggests that the boards will be unable to prevent the growth of these bodies. This will happen even where local further education colleges have the experience and resources to offer training in the same skills.

Birmingham, South Tyneside and there are reports that both Telford and Dudley have the same problems.

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Conventional wisdom gets painful tap

In only nine months in office as Australian minister for education and youth affairs, Senator Susan Ryan has already given the bureaucrats of the education system a good shake and loosened more than a few conventional wisdom teeth on campuses across the nation.

In trips that have taken her to talk to college and university groups in every state, Susan Ryan has repeatedly called on Australian higher education institutions to become less insular, more responsive to community needs and more active in social reform.

"It is a great paradox to me that our universities, which we might suppose, draw on the best knowledge about the world we live in and give instruction in the best means of increasing that knowledge, are not moved to initiate corporate social action of any kind whatever by this knowledge," she says. "I do not propose that universities should be solely concerned with social reform, or that they are the only institutions in our society which should exercise that kind of responsibility. I would be greatly reassured, however, about the willingness of the tertiary institutions to play a constructive role if they were to make a start on the business of ensuring social justice and equity within their own walls."

This is a theme Senator Ryan has returned to time and again. Universities and colleges - with some honourable exceptions - cannot be proud of their record in making their courses available to women, to the children of poorer families, members of some ethnic minorities, rural dwellers or aborigines.

She has warned: "It is time for the universities to re-examine the roles they play in relation to society as a whole. If they undertake this examination with the vigour and enthusiasm that the government thinks appropriate, they can count on the government's full support. Without becoming more socially responsive, universities will find it difficult to regain the support and respect of the community and if universities lose community support, the government loses impetus for expanding its financial support."

Higher education, however, is not likely to be as quickly reinvigorated this time round as it was under Kim Beazley - Susan Ryan's predecessor in the portfolio when the Labor Party last came to power a decade ago. But that is principally because the economic climate is wintry today, compared with the balmy spring of 1973.

Principally, but not wholly, "We want to see signs that universities are capable of responding and upgrading their efforts by doing hard, internal things, taking hard, internal decisions, before we would be prepared to allocate them extra funds," Susan Ryan says, adopting an attitude oddly reminiscent of the former Liberal minister for education, Senator Peter Baume.

She asserts, too, that many academics are frustrated by the man-

WORLDWIDE

Geoff Maslen assesses the effects of Australia's new policies

agement policies of university administrators - not just the younger or female academics but many others who believe that the institutions have become bureaucratic and unimaginative.

"The general impression I have got going around campuses is of a stalesness - and a view that they cannot do anything unless they're given a lot of money first. We don't accept that." The new minister, in other words, has not lost any time in making clear what her priorities are and how higher education will be expected to respond to them.

Almost as soon as she moved into the education minister's small, modest suite of offices in Parliament House, Senator Ryan began putting her party's election platform into effect.

The Fraser government's controversial student loans scheme was just about to start distributing money in March when it was scrapped. Proposed amalgamations of tertiary campuses at Newcastle and Armidale in New South Wales - again set in train by the former Conservative administration - were called off.

The department of education, however, itself underwent a merger with the office of youth affairs (formerly within the employment ministry). Administrative reforms of both were set in train to give them a policy development role. Departmental heads were shifted about, new blood brought in and a woman - Ms Helen Williams - became deputy secretary of education and the most senior female in the commonwealth bureaucracy.

In July, Senator Ryan was able to announce that more money would flow to education in 1984, including \$70m to be spent on encouraging greater participation by young Australians in education. Higher education would receive a small increase in its allocation, notably an extra \$10m to allow universities and colleges to enrol an additional 3,000 students next year.

More importantly for institutions, Senator Ryan promised to restore retrospective supplementation of grants, whereby the government guarantees to make up the cost of any increases in salaries or wages during a year. This had been abolished causing great concern among administrators.

Technical and further education re-



ceived the biggest boost - a 5 per cent increase in grants - and a ringing endorsement by the new minister's record in providing programmes that are accessible to the more disadvantaged groups in Australia.

Women make up the largest of these groups, of course, and it is in her efforts to achieve some sort of equality for women in Australia that Senator Ryan's influence is likely to be most immediately felt. As minister assisting the prime minister on the status of women, Senator Ryan introduced a Bill into Parliament in June which would outlaw sexual discrimination on the basis of marital status or pregnancy.

The Bill has met with a remarkably stormy reception - in part because of inadequate drafting, but also because of the threat it seemed to pose to many people's cosy perceptions about the roles of males and females in this country.

According to Senator Ryan, the effect of the legislation on tertiary institutions will be to assist in remedying longstanding inequalities between male and female staff members and, indirectly, between male and female students. Although females make up nearly half the student enrolment in colleges and universities, only 17 per cent of full-time academics are women and they are mostly concentrated at the lowest levels in the hierarchy.

The structural discrimination against women employees will not be significantly addressed by the Sex Discrimination Act, Senator Ryan says. So she plans to introduce affirmative action legislation next year that will require institutions to develop internal management plans to show how they

intend to overcome structural inequalities.

The furor generated among Conservatives by the Sex Discrimination Bill is likely to seem mild when they start reacting to the idea of affirmative action. Not that this will deter Susan Ryan. She is, above all, a staunch feminist and - as the first woman to occupy a government front bench in an Australian Labor administration - probably the most powerful in the country.

One could hardly have predicted this, given her origins. She was born into a strongly Roman Catholic family at Camperdown, on the poorer outskirts of Sydney, 41 years ago and was schooled at the Bridgeline Convent in Maroubra. She went on to do an arts degree at Sydney University, married an Australian diplomat at 20, was briefly a teacher, then a full-time wife and mother of two children.

She came upon the feminist movement in New York in 1970 and decided she had long been a closet member of the sisterhood. When her marriage broke up, she returned with her children to Australia and finished an MA in English literature at the Australian National University. She joined the Labor Party as soon as she got home and was a founder of the Women's Electoral Lobby in Canberra.

Her feminist supporters helped build her path to preselection and Parliament - first as a member of the House of Assembly to the Australian Capital Territory, then in 1975 as one of two new senators for the ACT.

Two years later she was on the Opposition front bench and was variously Labor's spokesperson on the media, arts, Aboriginal and women's

affairs. She was outspoken in each of these areas and was often in the public eye, even before the full media spotlight fell on her this year with her elevation to the ministry and the Hawke government's inner cabinet.

Today, she appears to be re-evaluating her job. She is a small, vivacious woman who greets her visitors with a warm handshake and a warm smile. She is efficient and business-like in her dealings with the press and comes across as intelligent and articulate with a rapid phrase smoothed by constant repetition. According to some members of her department, however, she is a very top of the administrative work load on the job entails.

She herself says that since taking office the amount of mail flooding in has more than doubled. But there are no problems coping - just getting the department reorganised and improving the lines of communication.

Despite being the lone female among Labor's cabinet members, she seems to have earned the respect of her colleagues. "My colleagues accept that I'm going to do things like attacking sex discrimination and appointing women to statutory authorities," she says. "They're resigned to it."

Resigned? "Well, some are even enthusiastic about it. The prime minister is one of those and the more I work with Bob Hawke the more I'm impressed with his capabilities."

Outside the cabinet, Susan Ryan has scored points for her efforts to reduce the inequalities in Australian education, especially those affecting Aborigines. Even her critics give her marks for application, although that is all she will acknowledge.

The vice-chancellor of Sydney University, Professor John Ward, for instance, observed after Labor's first week in office that little was being done to help the teaching and research standards of higher education.

"Virtually nothing is being done to improve the prospects that Australian will eventually have one of the world's great universities," Professor Ward said. "The government, as it is fully entitled to do, has made a clear choice. Resources are scarce at present."

Similarly, a group representing national academic, student and teacher associations and calling itself the Higher Education Round Table, has criticized the small increases in grants to universities and colleges next year.

Likewise, the government's failure to keep its promise to bring the level of the Tertiary Education Allowance to that of the single adult debt payment has come under attack.

"We're not sliding from our commitment to raise TEAs," Susan Ryan says. "But we decided that the unemployed had to have priority for a large increase."

Moreover, she says, if the government's strategy for increasing young people's participation in education succeeds, there is the strong prospect that considerably more money will flow to higher education in the next triennium, starting in 1985.

The problems confronting tertiary institutions around Australia - many of them the result of years of belt-tightening under the liberal - are not going to be solved overnight. But there is considerably more optimism on campuses than there has been for a long time.

Christian and sceptic

Edward Norman reflects on how the thinking of Sir Herbert Butterfield helped shape his life

Presences



Butterfield: extraordinary loyalty to Methodism

Herbert Butterfield was the last distinguished historian to become Master of Peterhouse. That was in 1955, and he held the post until his retirement in 1982. The Cambridge College over which he presided was noted for its historical scholarship: Sir Michael Postan, Sir Denis Brogan, Dom David Knowles, and Dr Denis Mack Smith were his fellows. But even of those, it is Butterfield who most seems to be remembered by his pupils as a great teacher, as a man who inspired some of the best of his pupils as a great teacher, as a man who inspired some of the best of his pupils as a great teacher, as a man who inspired some of the best of his pupils as a great teacher.

The layers of his scepticism could in part be penetrated - but not to reveal any hard bedrock upon which they rested. There was, in Butterfield, no systemic thought, no general world-picture or set of lucid references to which the inquirer (or Butterfield himself) could resort. The words at the end of *Christianity and History*, are to be taken quite literally: "I hold to Christ, and for the rest be totally uncommitted."

Butterfield did actually believe in history as a subject, however; it is not just one among a number of useful disciplines, but a civilizing way of informing mankind about his limitations - it is the means of revealing the need for scepticism. The mere pursuit of the subject, furthermore, disclosed human fallibility. It was, he wrote, easier for a camel to go through the eye of a needle "than for the most excellent trained historian to repeat a piece of gossip or an anecdote at the dinner table without adding a little verisimilitude."

What chance, then, for relying on the evidence of the past? Some "future studies" of the 1930s and the 1940s, he wrote (in 1948) may even be misled by the false "narratives of pretended eye-witnesses," and by "faked diaries."

From the accumulating distance of time it is now possible to see - and as Dr C. J. McIntire, who has studied his religious beliefs, has pointed out - that it was Butterfield's historical writing. Even so, McIntire has observed, "twice writing on the problems of historiography, his work melts into religious thinking." *Christianity and History* was certainly his most famous and widely-read book, but the vision of the relationship between human personality and historical processes, which is spelled out in one set of contexts, is also at the heart of the *Whig Interpretation* (1931) and his *Wiles Lectures* (published in 1950) *Man, His Past*. It is, too, a vision of scepticism, and it is the last thing which his readers and so many of his pupils seem to have grasped. Butterfield was brought up as a Methodist - not a particularly narrow one, but a Methodist of the tenacious Yorkshire Methodist of his childhood. When he went up to Peterhouse as an undergraduate in 1919 he was already a Methodist lay preacher, having begun his work while still a boy at Keighley Grammar School. He continued to preach until 1936, and his name thereafter remained formally on the list of official preachers. His Methodistism was important to Butterfield, and although he later admitted that his religious beliefs were of little practical use to him in his college days in the Wesley Chapel, in

King Street, that his Cambridge devotional life was centred. Worshippers at the place, indeed, were said to be unaware that the quiet man who joined them each Sunday over so many years had any public role at all - least of all did they suspect him of being the Head of a House. This loyalty to Methodism was extraordinary: Butterfield's scepticism of mind, it might be supposed, and his intellectualism, were better suited to the Church of England, where scepticism about even the most fundamental religious propositions is commonplace. The reason for his continued adherence to Methodism lay in his anti-Calvinism; he distrusted hierarchy, disliked religious formalism, and observed, through history, the clergy making claims to insights and authority which were quite unwarranted. But he gave up Methodist preaching: it is significant.



Edward Norman

Now despite the worldwide success of *Christianity and History* Butterfield's ideas had no influence upon the Christian churches. The inherent scepticism of the lectures, and above all, their distrust of human idealism, was completely at variance with the carnal trends in educated Christian thinking in the middle years of the present century. It is clear what the Christian leaders who apparently endorsed the lectures thought they were about; perhaps they were so relieved at chancing upon a prominent and respected layman who bothered with Christianity at all that they elected to look no further. In fact Butterfield had an unshakable personal faith in Christ and a total disbelief in the human institutions which sought to explain and praise to the understanding of things, as Butterfield interpreted it, precisely because of the place of personality in historical processes. There were, he supposed, no grand designs, no moral lessons, no philosophies which historical study held out. Introduced to the thought of Lord Acton by Harold Temperley, his teacher at Peterhouse, Butterfield found it to be deeply alien, and devoted a chapter of the *Whig Interpretation* to an attack upon it. Acton believed the historian had a prophetic function, to apportion blame or praise to the men of the past accordingly or not as they had hindered or encouraged progressive liberty. To the relativism of Butterfield's mind, such a proceeding was not only a disservice to the past, but it encouraged dangerous delusions about the capacity of men to assist, by mere understanding, their attempts at overcoming evil in the present.

It is here, in the analysis of human personality, that Butterfield was most sceptical and most Christian. This was not a paradox: it is only to the quest for objectivity of contemporary Christianity, with its partial world, that

a Christianity centred upon scepticism about human motivation will seem shocking. Butterfield saw that Christianity was an historical religion, and that historical events "come out of personalities and run into personalities." He was not concerned with the rationalized accounts men give of their ideals, but with the common depravity of the human personality which makes all human attempts at improvement ambiguous of inspiration and flawed in performance. He observed in history, that is to say, the evidence of the Christian doctrine of Original Sin. The historian, he wrote, should have "a lower view of human nature than the one commonly current in the twentieth century." The unthinking - which is most educated people - will accuse a man of true insight, he noticed, of "cynicism." But it is not so; the man of real insight is the one whose scepticism about man himself has a religious origin - the man who sees that the "seamy side of human nature" is not so much accident of background or environment, or the fault of certain sorts of people, but is the fruit of a fallen creation. The "infirmities of human nature are always with us," Butterfield declared, and the modern world is now suffering, not from lack of idealism, but through "the superficiality of its idealism" because they do not understand man himself. A true study of the past, one which is concerned with ideals or ideologies, but with people, is a corrective to vision - though it will not help to put the world to rights, for the world is developed in a steady-state of evil and virtue conjoint. "What history does is rather to uncover man's universal sin," and in another place "It is essential not to have faith in human nature," for "such faith is a recent heresy and a very disastrous one."

No wonder Butterfield's thought has found no resonances in the modern Church. But what did his pupils make of it all? Butterfield was known as a "Christian thinker," yet there was no clear Christian exegesis in his writing of history - indeed, there was no exposition of any systematic scheme of things. Intellectually, Butterfield had no doubt about the truth of Christianity for two reasons. In the first place his traditional view of man corresponded with historical reality, as he saw man in the past; full of frailty. In the second, his belief in the priority of personality reached its apex in the God who became man, thereby personalizing the creative impulses of the universe and confining the limitations which man had before perceived more crudely. But the nature of the creation was changed, and in the writing of history the same nuts and bolts were still visible. There is no "religion" in Butterfield's historical writing because it is absent, as men would see it, in life itself. Most of Butterfield's pupils, however, cannot have appreciated the springs of his scepticism and cannot have known in what sense he was a "Christian thinker." What they recognized was an obvious distinction of mind, a kind of paradox, emanating from a person of great kindness. His influence resides in them, for he did not establish a school of thought or a historical method. Butterfield would have been glad to think it so. Treasure in earthen vessels was exactly what his understanding of human life was all about.

The author is dean of Peterhouse.

Patrick Nuttgens



Reading between the figures on poly unemployment

A few weeks ago I took part in a BBC2 history programme under the title "The Race for a Place". Around three short films (showing pupils taking their A levels, the recent history of educational administration and graduates trying to find jobs at the end) a discussion took place between a vice-chancellor, John Ashworth of Salford, Sir Keith Joseph and myself as a polytechnic director, all under the cure and control of Ludovic Kennedy. I always come away from such exercises convinced that it was dreadful but in fact a surprising number of people watched it and the comments coming back to me have been lively and on the whole favourable. We must have done a good job. One of my correspondents writes that Ashworth must be a superb polytechnic director.

I wondered which was worse - failing to get into a university (a disaster which thousands of unfortunate schoolchildren have been threatened with by their teachers) or failing to get a job at the end (probably less of a disaster in the long run because things may always change and at least the student years were with any luck a memorable experience). But the spectre of graduate unemployment is the more urgent threat and various events have made me think about it recently.

The fact is that any responsible teacher or manager of higher education must be concerned about graduate unemployment. Whatever some academics may say about the dispassionate love of learning for its own sake, the majority of students are very interested in having a job at the end. It is often nowadays suggested that they might do better with a general rather than a vocational education on the assumption that if they are not trained to do anything in particular they will be able to change from one kind of incompetence to another without difficulty.

That is a matter of concern in the polytechnic because most of them have taken a very different path from the generalist route. They were established to be a socially responsive element in higher education and the vocational success of their students is therefore a central feature of this philosophy.

It is particularly a matter of some concern when reports are published which indicate that the prospects are bad for poly graduates. *The Times* had a report at the top of the page in November of this year with the headline "Employers Banned Against College and Polytechnic Graduates." It was based upon a study which has not been published, which makes it difficult for anyone who cares to check the facts. A crucial finding was that employers were unconcerned about degree content. What they cared about was the institution from which the graduates came. One recruiting officer was reported as saying that "some of the poly produce rubbish".

Apart from the issue of what that odd thing is that the findings of the study come with our experience and that of many careers officers I know. Ted Means of Sheffield Polytechnic, who appeared on that programme, assures me that it does not match his experience either. For us the more vocationally slanted courses do much better than any generalist ones. And our unemployment rate for the last few years has been half the national average. I notice that *Graduate Post* makes the same criticism of the report: its own contact with em-

ployers discovered a different view of recruitment from that of the survey. But it is not the first time recently that such findings have been published. I don't think I am paranoid - even though paranoia is said to be the occupational disease of the academic world - but I do wonder if someone is getting it as.

A report from the Unit for Manpower Studies in January 1981 entitled *Higher Education and the Employment of Graduates* stated that "polytechnic graduates from all groups except engineering are more likely to be employed than are university graduates and the position for polytechnic graduates is particularly bad".

The report was sufficiently alarming for me to ask our own careers officer to make a close study of the survey. The figures on which the conclusions were based were those produced annually by polytechnic and university careers services. Being long established and usually better endowed with resources, university careers services are at a clear advantage in the efficiency of their statistical gathering. It might even be that the comparative figures are measuring the size of careers services as much as levels of unemployment.

But even that didn't explain some of the more suspect conclusions and statistical methods. For example, liberal arts courses in polytechnics were particularly heavily criticized. The UMS report compared the destination in 1979 of university graduates in arts subjects numbering nearly 13,000 with polytechnic arts graduates numbering at the most 1,100. For earlier years the figure dropped as low as 304.

In one table, one student unemployed after a polytechnic arts sandwich course was shown to represent a 16.7 per cent unemployment rate. It seems to be a general error to compare dramatically unlike quantities. In one survey it was surely irresponsible to compare 61 history graduates from polytechnics with 2,182 who left university and express the figures as a percentage. A 14 per cent unemployment rate for polytechnic historians meant in fact that only eight students were affected. Similarly 2,493 unemployed English graduates were compared with 127 polytechnic English graduates.

A fundamental weakness in some of these comparisons is the habit of taking all the large university departments and then making comparisons with corresponding polytechnic courses. If the exercise were done the other way round, first taking a selection of major polytechnic courses, like accountancy, business studies and design and then comparing them with similar university courses (if there were any) it would show up some other differences between the institutions. And if the graduates from courses other than degree courses - the higher diplomas and professional courses which are degree equivalent - were considered, the results would be even more notable. The unemployment rates from some of our certificate and diploma courses in catering, accountancy, bilingual secretarial and social work is virtually nil every year.

We can't be alone in this. But if things get worse we might ask to our vocational philosophy and launch a new honours degree in Unemployment Studies.

E. Patrick McQuaid reports from America on the latest developments in public television education courses

Going back into Vietnam

The United States public television network is adopting an Open University approach and offering its series on Vietnam as a college course.

The Pittsburgh, Pennsylvania Council on Higher Education, a consortium of nine area colleges, chose Vietnam as its first in a series of telecourses. The programme is offered for academic credit in a variety of disciplines, among them sociology and political science, according to the council's director, Mr. Don McQuaid.

The 13-part documentary, *Vietnam: a television history*, premiered last April on Channel 4 and scheduled for broadcast again this spring on BBC1 took six years to make. It was an international venture involving Britain's Central Television and France's Antenne-2.

The French planned a six-part series with the first three hours covering the French involvement. The Americans decided to devote two of their 13 hour-long episodes to events preceding the 1954 US intervention. In "Roots of a war" (which was slightly re-edited for British audiences) the French and British hostility toward Ho Chi Minh's revolution are examined. Episode two, "The first Vietnam war," covers the French campaigns from 1946 to 1954 and offers astounding footage of the decisive battle at Dien Bien Phu.

The American producer of these two episodes, Mr. Judith Vecchiarelli, says an accurate documentary on the French period in Vietnam could not have been possible without French cooperation. "Their researchers managed to

track down some footage never before seen publicly, such as scenes of Ho Chi Minh at the Fontainebleau Hotel in 1946. He was attending the last attempt at negotiations before the war broke out with France. The film belongs to the woman who was the little girl in this scene."

Across the United States, local public television affiliates, libraries, colleges and universities, state humanities councils, and veterans' organizations are running activities and "outreach" courses to coincide with each broadcast. In Rhode Island the local affiliate is working with a long programme to broadcast after the series has an estimated 20,000 Vietnamese veterans in North Carolina, and in Minnesota, veterans groups and counsellors are working on special programmes to examine the local impact of the war and to direct viewers and veterans to local resources for more information or emotional help.

A total of 59 scholars and journalists acted as consultants for the programme, according to Ms Sara Althoff, a member of the Boston staff. Roughly 3,000 pages of transcripts were churned out in transcripts from interviews conducted specially for the series.

Some 24 hours of stock footage, including

203,162 feet, were compiled from various archives worldwide and kept track of by a computer in Austin, Texas. Project staff conducted nearly 300 interviews in the States, Europe and Asia. In addition, 29 film editors and sound specialists contributed to the American version.

Chief correspondent for the series, Mr. Stanley Karnow, travelled and filmed interviews throughout Vietnam beginning in 1961 with British producer Mr. Martin Smith, the French producer Mr. Henry de Turenne, American producer Mr. Elizabeth Deane and the executive series producer, Mr. Ellison.

In an interview typical of the series, a North Vietnamese soldier describes his part in the final rolling into the former south capital: "None of us knew how to get to the independence palace. So many streets led to downtown Saigon, and I myself had no idea where I was. So I turned to an old woman and asked, 'mother, where is Saigon?' and she replied, 'You're in Saigon'."

In the spring of 1977, US General William Westmoreland approached executives at Boston's WGBH television station and suggested that a documentary about Vietnam from a military perspective was long overdue. Programme de-

passing all perspectives. By 1982 an odd assortment of allies had responded to appeals for contributions. Public broadcasting had put up \$50,000 for initial research and development, matched by \$50,000 from WGBH's discretionary funds. The ABC network also contributed \$50,000 and permitted full use of their archive and royalty free reproduction of tapes and films. Over \$1m came from the federal National Endowment for the Humanities and public television affiliates from across the country added \$800,000. Smaller grants and cost-cutting assistance from British and French producers brought in another \$300,000. Finally, the Chubb group of insurance companies became the project's sole corporate sponsor.

Several companion volumes have been written to coincide with the series: *Vietnam*, from the Viking Press; is by Mr. Karnow, and parallels the television history. *A Viewer's Guide to Vietnam*, a 16-page tabloid distributed through local newspapers and available from local network affiliates. The Alfred Knopf Inc. publishers have issued *Vietnam: an anthology* to tie the series together. *Vietnam: a history and a plan history* and a faculty and administrator's guide to *Vietnam*, which includes audio cassettes, to help teachers develop courses based on the series. Interest in the series is so widespread that WGBH found it necessary to publish a special newsletter, *The Vietnam Project News*, for special journalists, librarians and educators upon dates on activities associated with the broadcast.



The policy makers: J. B. S. Haldane (left), Lord Trend and Sir Ronald Mason.

A war of independence

When the Advisory Board for the Research Councils met shortly to discuss Sir Ronald Mason's study of commissioned research, they will be debating issues of fundamental importance for the future of science policy in this country. It would be easy to be misled by the brevity of the Mason report into overlooking its significance. At stake is the future direction and control of policy for civil science research in Britain.

The origins of the present debate can be traced back to the early involvement of the Government in funding research before the First World War. When the first national health insurance scheme was introduced in 1911 part of the income from contributions was set aside for stimulating research on the advice of a newly created Medical Research Committee.

In the industrial arena, concern at falling behind the Americans and Germans led to the creation of a Committee for Scientific and Industrial Research in 1915. Both committees were attached not to functional departments of the Government but to the general purpose Privy Council.

From these early beginnings emerged the Department of Scientific and Industrial Research and the Medical Research Council. These bodies enjoyed a fair measure of autonomy. Their membership consisted of independent individuals, both scientists and laypeople, and they had full-time scientifically qualified secretaries.

Decisions on scientific matters were entirely free from outside interference. Especially important from the standpoint of autonomy from sectional government interests, they negotiated their financial requirements direct with the Treasury.

This position of scientific independence was confirmed and reinforced by the 1918 Haldane Committee on the machinery of government. Haldane recognized that central government should have a role in stimulating research in general as well as that required directly by government departments themselves.

The "Haldane principle" established that the control of such non-departmental research should be separated from the executive functions of the Government by placing it under a "minister who is in normal times free from any serious pressure of administrative duties". The Lord President of the Council, but ministerial responsibility did not extend to the exercise of judgment over the scientific value of the individual research projects.

Haldane did not envisage that his solution would provide a lasting framework, and he would probably have been surprised himself by its durability. His committee suggested that the time would come when the expansion of research activity would outgrow the Privy Council framework and that a separate Government department would "take its place among the most important departments of government".

Events were to prove Haldane a better judge of the future importance of research than the organization of the Government. It was only after 1945 that Government expenditure on research began to take off. In real terms civil research and development expenditure increased by tenfold between 1945 and 1962. At first the Government's response to this growth and to the scientific challenge of the Russian Sputnik was largely cosmetic.

In 1959 Lord Hailsham was appointed minister of science but the role was confined within the duties of President of the Council. His duties included responsibility for the research councils, atomic energy, space re-

Clive Booth looks at the struggle for control of funds for civil science research

search and broad questions of scientific policy outside the sphere of defence. However, other ministers remained responsible for the scientific establishments within their own departments.

Excluded from the science minister's portfolio were the universities, although they accounted for (and still account for) much of the national effort in basic scientific research. The Chancellor of the Exchequer, advised by the University Grants Committee, was in effect the minister for the universities. It was the UGC's task to advise the Treasury on the financial requirements of the universities and to ensure that the universities met national needs.

But the appointment of a minister for science was a political act which did little to rationalize the organizational framework. When the Trend committee came to review the organization of civil science in 1962/63 they found: "... first, that the various agencies concerned with the promotion of civil science do not, in the aggregate, constitute a coherent and articulated pattern of organization; second, that the arrangements for coordinating the Government's scientific effort and for apportioning the available resources between the agencies on a rational basis are insufficiently clear and precise."

More specifically, Trend's criticisms were that the distinction between the roles of the universities (as the main centres of scientific research) and the research councils (as the promoters of research in fields of special interest to the Government) was being obscured; that the organizational structure had not adapted well to the emergence of new fields, such as nuclear physics and space research, which were dispersed among different bodies; and that there was a need for greater concentration of effort on industrial research than could be sustained by the DESIR with its twin responsibilities for industrial and general scientific research.

While Trend recommended that the dual support system for financing university research should be maintained, safeguards were proposed to ensure that the funding of any projects which had become an integral part of the universities' work should be transferred from the research councils to the universities' general revenue expenditure. However, the committee made no recommendations about ministerial responsibility for the universities because of the simultaneous existence of the Robbins Committee on higher education; but they did suggest that there would be advantages in placing universities under the minister for science.

The minister for science, Trend recommended, should have "additional substantial responsibilities for scientific manpower, allocating resources among the research councils, identifying national scientific needs, the exchange of scientific information, international scientific policy and the organization of administrative machinery for promoting scientific research and development. The staff would be strengthened to reflect the minister's more substantial responsibilities, which would be involved in two-way interactions with senior scientific qual-

ified staff in the research councils.

If Trend's recommendations had been implemented, the Haldane vision of a Government department of first rank responsible for research would have come a step nearer.

However, this was not to be. When the Trend report was published in October 1963, Parliament had already entered its fifth year and expectation of a general election ruled out the possibility of substantial changes in the machinery of government.

It was not until 1965 that those parts of the Trend report which were accepted by the new Labour Government were enacted into law. The Science and Technology Act of 1965 created three new research councils, the Science Research Council (now SERC), the Natural Environment Research Council and the Social Science Research Council, alongside the Agricultural Research Council and the Medical Research Council.

All five research councils were brought under the Secretary of State for Education and Science whose own post had been created in 1964 by the merger of the Ministry of Education and the Ministry of Science. The new responsibilities for a broad area which included, for example, atomic energy and industrial research, the new secretary of state was placed in a more influential position over a much more limited area.

Research Councils no longer negotiated their financial requirements directly with the Treasury but had to work through DES officials and had to compete with other councils for a science budget controlled by the secretary of state. DES officials were in the potentially strong position of arbitrating between research councils and this provided some of the staple work of the DES science branch.

The forum for this arbitration was the Council for Scientific Policy, the membership of which was drawn from universities, industry and research establishments with assessors from the four natural science research councils. The secretariat of the CSP was provided by the science branch.

Each year they prepared for the council a "forward look" offering projections of research activity and expenditure on various research areas, and discussing the consequences of growth or contraction both in the total science budget and in the expenditures of individual research councils. Recently, the forward look has been increasingly integrated with the Government's annual review of public expenditure.

One of the most significant decisions emerging from the forward look process was to initiate in the early 1970s a "big science" strategy away from the "big science" (astronomy and nuclear physics) towards other areas of science. Although there have been only seemingly marginal shifts of resources among research councils there has been considerable redeployment within research council programmes.

The 1982 forward look (the first to be published) proposed significant reductions in the ARC and SERC programmes in order to permit growth in other council spending, especially the SERC. Allocating resources among research councils was, however, small beer compared with the concept of a minister with real and overarching responsibilities for civil scientific research, advocated by Trend. Yet the organization of responsibilities for the science branch, and the establishment of DES science branches in the activity which, according to the DES annual report of the period, reached a peak in 1981, was a significant change with senior scientific qual-

gradual loss of momentum and of science policy's moving away from the centre of the stage. Governments became preoccupied with the poor performance of British industry and attention in research policy concentrated increasingly on mechanisms for applying research results rather than the generation of new discoveries in pure science.

The position of the DES was further weakened by the 1971 Rothschild report. Rothschild argued that applied research should by definition have a customer, that much research council work, on the DES's own admission, was applied and that "... this work had and has no customer to commission and approve it. This is wrong. However distinguished intelligent and practical scientists may be, they cannot be so well qualified to decide what the needs of the nation are, and their priorities, as those responsible for ensuring that those needs are met."

Rothschild made short shrift of the Haldane principle: "The concept of scientific independence used in the Haldane report are not relevant to contemporary discussion of government research ... the [Haldane] report asserted that Government research should serve the community as a whole."

But, in fact, the report mentions only such "community-serving" research activities as follow directly from specific and formulated government policies. ... If [Haldane] implies that the application of the results of research should be the responsibility of the independent scientific ministry, it should have been unacceptable in 1918 and must be now ...

In spite of a rearguard action by Sir Fred Dainton and the Council for Scientific Policy which proposed a new executive board to oversee the research councils, the Government accepted the main recommendations of the Rothschild report. The scientific capability of some Government departments was strengthened by the appointment of chief scientists.

Departments gained members, instead of assessors, on the research councils in whose work they had an interest. Part of the science budget was transferred to executive departments to commission work from the ARC, MRC and the NERC.

Finally, the CSP was replaced by the Advisory Board for the Research Councils, on which the newly appointed departmental chief scientists would serve as full members. The ABCRC was given more restricted terms of reference than the CSP emphasizing liaison between research councils and the users of their research.

Further Government measures in 1974 and 1976 continued the erosion of the central position once occupied by the DES. In 1974, a non-DES minister, the Lord Privy Seal, was given responsibility for ensuring that adequate co-operation existed between government departments in the research and development field.

A committee of chief scientists and permanent secretaries under the chairmanship of the secretary of the Cabinet was created to perform a general coordinating function in science and technology. However, Government witnesses questioned by the Select Committee on Education in March 1981 indicated that the committee was hardly active.

More important, the establishment in 1976 of an Advisory Council on Applied Research and Development chaired by the Lord Privy Seal (and since 1979 by an eminent industrialist) reflected the growing conviction that some of the country's economic shortcomings could be attributed to failures in applying the results of science and technology. The ACARD's importance compared with the ABCRC has been seen from the fact that its reports have been addressed to, and in some cases commissioned by the Prime Minister himself.

Some idea of the decline in the capacity of the DES to engage in science policy making can be gauged from the fact that of the 16 staff in 1968, six were on scientific grades. Of the seven staff in 1981, none were on scientific grades although three are understood to have originated in the scientific civil service.

It is interesting to note that the number of senior staff in 1981 was smaller, even than the corresponding part of the office of the minister for science in 1962 which contained four assistant secretaries and four principal officers.

Within the DES itself, the work of the science branch has not until recently been seen as a mainstream activity. Responsibility for science has been

along with other miscellaneous functions and it was only in June last year that one junior minister was given responsibility for the related areas of science and higher education.

In spite of being severely reduced in number, the staff of the science branch have continued to engage in important policy work on such subjects as post-graduate education, the financing of university science research and the publication of the 1982 forward look which was a signal achievement both for its contribution to public understanding and for the quality of its presentation.

Compared with the aspirations raised by the Trend report 20 years ago, the role of the DES is now quite narrow. It was defined by the 1979 *Review of the Framework for Government Research and Development* as covering "research which is not undertaken with direct application in mind but rather for the purpose of advancing knowledge".

Departmental ministers were seen by the review as setting priorities for research in their own areas: "... total Government expenditure on research and development is not determined centrally and distributed among possible beneficiaries: it is the aggregate of a number of separate departmental decisions ... In short, the Government does not have a single science policy: it has a whole range of policies ..."

Now the Mason report has called into question the wisdom of this disaggregated approach to science policy: the commissioning arrangements devised by Rothschild "have not provided the dynamic for change that was intended; there is no evidence that they have added to or withdrawn from research councils' sensitivities (of proxy) customer requirements".

While the pattern of applied research has changed little, Mason observes that there has been a squeeze on the volume of pure and strategic research (that which is medium term and undertaken partly because of potential applications). He attributes this to several causes.

First, Rothschild's recommendation that a 10 per cent surcharge should be levied on customer departments' programmes to enable contractors to undertake general research was never implemented. Second, some departmental customers sharply reduced their budgets for commissioned research with serious effects on the NERC, whose funds for strategic research fell by half in the five years to 1982/83.

Third, the funds transferred originally from the science budget to customer departments were larger than justified by the distribution of research council work between the pure, strategic and applied areas. Last, in spite of—or because of—a substantially increased and costly bureaucracy the dialogue between customers and contractors necessary for the success of the system did not exist.

It remains to be seen whether Mason will assist the DES and research councils to recover the ground lost since 1971. The research councils will welcome the proposal to distance customer departments from detailed interference in commissioned research but they will be suspicious of the more influential role postulated for the ABCRC.

Research Council Institutes will be braced for a battle against closure, reorganization and transfer of some of their funds to the more flexible universities and polytechnics who are potential competitors with the Institutes. The chairman of the ABCRC, Sir David Phillips, already more closely involved in Whitehall than any of his predecessors, is unlikely to object to the strengthening of his role and conferment of the rank of second permanent secretary (equal to the chairman of the UGC). Could he be the first chief scientific adviser to the DES?

Mason, like Trend 20 years ago, recommends that scientific administration should be brought into this area of policy making. The British research council system is widely admired abroad and has played a leading part in maintaining the quality of British science. If Sir Keith Joseph is concerned to know how Britain, with its reduced means, can continue to produce pure and strategic research of world class, he should study the Mason report carefully.

Clive Booth is deputy director of Plymouth Polytechnic and was until 1981 an assistant director in the Department of Science.

I recently had the somewhat unnerving experience of being the object of a violent demonstration. A protester threw herself in front of my car as it left York Minster, and others tried to lie in the road. Had it not been for the skilful driving of my chauffeur, there could have been serious injuries. As it was, the demonstrators were swiftly dragged away by the police. One of them explained afterwards: "We just wanted to show our displeasure about Margaret Thatcher coming to York for the enthronement this month ... (a local company) ... is closing down as a direct result of her policies. But we were also protesting at cut-backs in the National Health Service, the problems of the jobless and cruise missiles coming to this country. No way was it an anti-religious demonstration against the Archbishop. There were a lot of Christians in the group."

Such all-purpose protest against the wrong person sheds a curious light on our times. It may seem a far cry from the solemn rejoicings surrounding the Quinquennial of Martin Luther. Yet Luther's "Here I stand. I can do no other", still represents the authentic voice of the protester, and it is not for nothing that the word "Protestant" was first used in a Lutheran context, even though Luther himself did not invent it. I hope, therefore, that some reflections on the relationship between Protestantism and protest may be an appropriate marginal comment on this year's celebrations.

The actual word "Protestant" was born at the Diet of Speyer in 1529 where the evangelicals, as they then called themselves, protested against unfair discrimination. The Diet had agreed that Catholic minorities should enjoy religious liberty in Lutheran regions, whereas Lutheran minorities should only enjoy such liberty in Catholic regions where there was a serious danger of civil disorder. The name stuck when the opposition asserted that "they must protest and testify publicly before God that they could do nothing contrary to his word". By linking protest with testimony they gave the word a positive connotation which many Protestants would still claim to be of its essence. By the mid-sixteenth century, however, the negative sense predominated, and it had become widely used as a neutral term applicable to all forms of anti-establishment.

It is perhaps this negative side of it which has made most churches reluctant to use it in their titles. Out of 318 member churches of the World Council of Churches only 16 explicitly call themselves Protestant, and of those are in and around Indonesia. The Episcopal Church of America quietly dropped its Protestant prefix when nobody was looking. Within the Church of England the word never found its way into any of the official formularies, much to the annoyance of those who wish to emphasize the English Protestant heritage. The only liturgical context in which it appears is the Coronation service, where its anti-papal implications have an obvious secular, as well as a religious, resonance. Extreme Protestants protest with the Church of England attach high value to this isolated instance of its use, but for many Anglicans the word is an uncomfortable one which is avoided whenever possible.

Why this caution? It is more than a rejection of negativity. Other reformed churches may not use it in their titles, but they have no objection to its use as a general designation. The notion of western Christendom can be divided into Catholics and Protestants may owe more to the convenience of statisticians than to peoples' own feelings about where they themselves stand; but at least the labels are not rejected. Church of England hesitations rest partly on the belief that in England the Reformation took a unique turn. But I suspect that there is also an underlying sense that the word "Protestant" signifies something altogether too narrow. It is not just the Palaeys of this world who induce the feeling: Protestantism is an activity which belongs properly to minority, and a church which regards itself as secure and socially accepted is thereby likely to lose the cutting edge of its protestation.

A free church friend, when asked why he was still protesting about, and about, about Rome, and insisting on two points of continuing disagreement. But his second thought went back to the more positive notion of testimony, and he began to expatiate on the sovereignty of God and the constant need for radical criticism. In doing so he had shifted from the stance of a particular reformed church to that of a reformed Christian.

Present day divisions of the Christian world into conservative and radical may eventually come to be seen as equally unproductive and unnecessary. The conservative spirit and the radical spirit need not be regarded as alternatives. In a recent book I have attempted to make the point that both are essential for any true understanding of God. Thus it is only possible to know God as a reality transcending one's

Protest and Protestants

John Habgood reflects on the uses of a word which makes many Anglicans uncomfortable

The Archbishop waves to the crowd as he leaves York Minster after his enthronement



of a principle. In modern times this shift of emphasis owes much to the work of Paul Tillich.

It was Tillich who drew a clear distinction between Protestantism as an historical phenomenon, one among a number of denominational forms of Christianity, and what he called "the Protestant principle", a principle of universal significance of which historical Protestantism is only one particular embodiment. This principle, for Tillich, was an essential thread running through all genuine forms of Christianity, whatever their label.

"The most important contribution of Protestantism to the world past, present and future, is the principle of prophetic protest against every power which claims divine character for itself—whether it be church or state, party or leader. Obviously, it is impossible to build a church on the basis of pure protest, and that attempt has been the mistake of Protestantism in every epoch. But the prophetic protest is necessary for every church and for every secular movement if it is to avoid disintegration. It has to be expressed in every situation as a contradiction to man's attempt to give absolute validity to his own thinking and acting ..."

Churches which call themselves Protestant may lose hold of the protestant principle, as defined by Tillich, just as devastatingly as those which have never claimed to adhere to it. Creeping respectability takes hold of all. In fact, the idea that being a Protestant might have anything to do with modern forms of protest against a rag-bag of social ills would be a strange and offensive one to many of those to whom the word has come to signify solid, stable, undemonstrative virtue. Furthermore, protest within the churches, where it is found at all, is more likely nowadays to be directed towards objects outside the explicitly religious sphere, than against fellow Christians. The fact that the exact opposite of this is true in Ireland is a cause of offence and incomprehension.

Yet surely Tillich was right to see Protestantism and protest as part of an authentic religious stream which flowed from the Old Testament prophets, through the New Testament and surfaced in full flood at the Reformation. The stream has often flowed in trivial and churchmanly basins. Squabbles about churchmanship, bickerings on externals, the use of shibboleths to identify genuine Catholicism or genuine Protestantism, have all tended to obscure the deep sense in which the Catholic spirit and the Protestant spirit both need each other.

Present day divisions of the Christian world into conservative and radical may eventually come to be seen as equally unproductive and unnecessary. The conservative spirit and the radical spirit need not be regarded as alternatives. In a recent book I have attempted to make the point that both are essential for any true understanding of God. Thus it is only possible to know God as a reality transcending one's

to what is actually given us in the traditions about him. But we can only know him as God insofar as we recognize the utter inadequacy of those traditions to convey more than "the outskirts of this way". (Church and Nation in a Secular Age, p. 153 ff.) Continuous dialectic between the conservative spirit and the radical spirit does not make for an easy life, but then why should it? Religion, as von Hugel was fond of saying, is not meant to make us comfortable.

The spirit of protest, whether ecclesiastical or intellectual or moral, cannot be removed from Christianity without the danger of falling lapsing into idolatry. In this very general sense, those who shouted outside York Minster while the bastions of society enthroned a new archbishop within, were all part of the same game.

Whether a purely political protest was appropriate at that particular moment is another question altogether, and my own belief is that Christians who took part in the protest misjudged the occasion. Nevertheless, the general conjunction of ceremony and raw feeling, tradition and immediacy was, and is, a potentially fruitful one. The incident itself was trivial. But by setting this kind of thing within the much broader framework of the general outworking of the Protestant principle, it may be possible to plumb some of the opportunities and constraints which contemporary protesters should bear in mind.

First, and most obviously, Protestant history demonstrates how the right protest at the right moment can unleash huge and uncontrollable forces. However much Luther had a shrewd idea of what he was doing, he can hardly have guessed all its consequences, or approved them if he had. The protester has to make his point, standing as it were on the edge of the abyss, not knowing whether his hand might be the one which lights the powder train which blows up a nation, or church, or culture. Such moments in history may be rare, but they are a reminder of risks as well as opportunities, an inducement to a sense of responsibility as well as hopefulness.

Their rarity prompts the thought: contemporary protest might be more effective as a weapon if it were more generous economy in its use. When immense potential powder trains, and when the protesting attitude has become so familiar as to be disregarded, actual change becomes less likely than when protest is more restrained. It was surely the fact that the Church of England is not normally regarded as a protesting body which led to the unusual nervousness, in Government circles about its attitude to nuclear weapons.

A second lesson from Protestant history follows closely from what has just been said about the scarcity value of protest. The protesting spirit can easily become institutionalized. Protest itself becomes a way of life from which it is difficult to withdraw, at least outwardly, even though the real inter-

where. This is one of the dangers faced by the Greenham Common women. In becoming a quasi-institutionalized symbol of protest they are reduced to making and arousing stock responses. It is possible to admire them for their self-sacrifice and the strength of their conviction, but wherever the real nuclear debate is actually taking place, it is clear that it is no longer on Greenham Common. And the same is true of other ritualized forms of protest. Crows shouting "out, out" are ministering more to their own feelings of helplessness than to any real process of political change.

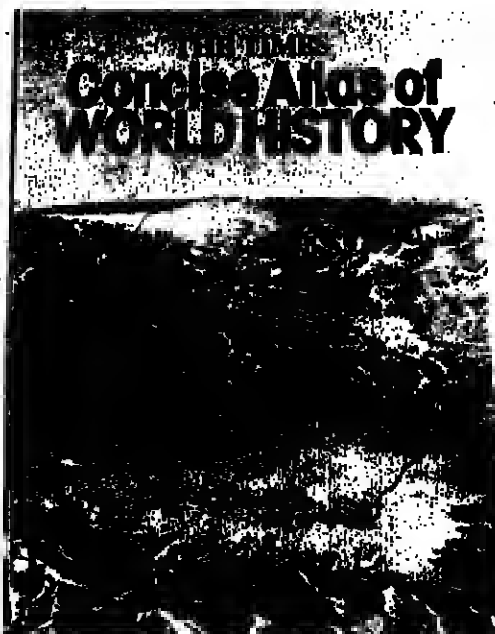
A third lesson might concentrate on

the inherent limitations of negative Protestantism. It is fairly easy to criticize protesters for not being constructive, and there is justice in the reply that they cannot be expected to do everything. When the majority ignore what seem to them to be manifest evils, it is enough to declare that evil is evil without specifying precisely what should take its place. But the danger of negatively based protest, especially in an age when the roots of evil and the responsibility for it may be hard to identify with certainty, is that it can slide into carping criticism of everything in general, an attack on "the system" as such, whatever that might be held to mean.

The challenge to testify to some alternative vision, and to work out its implications, need not be construed as a move in the game to show up protest as futile. There is a deep sense in which the integrity of protest itself depends on the possession and articulation of some positive beliefs. The original Protestants may have been reacting to unfairness without having a clear idea of exactly what they wanted to achieve. But they were in no doubt that their motive was obedience rather than resentment. So a pertinent question to today's protesters might be: "What imperative do you believe yourself to be obeying?"

A final lesson, and perhaps the most pointed one, follows directly from what has just been said. Negative Protestantism relies on its ability to identify, and rally support against, some external enemy, whether Pope or Prime Minister or "system". The Protestant spirit, on the other hand, directs its first criticisms internally. It is the limitations of its own apprehensions, the inadequacy of its own responses, the shortcomings of its own obedience which are the first objects of attack. The protest has to be made because God stands in ultimate judgment on all human endeavours. And this is why specifically Christian protest, even when, as in Luther, it is at its most provocative, always starts in the uncomfortable knowledge that judgment begins at the household of God.

The author is Archbishop of York.



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BOOKS

Fighting to the end

by Peter Newman Brooks

Luther in mid-Career, 1521-1530
by Heinrich Bornkamm
Dartmouth, Longman & Todd, £25.00
ISBN 0 232 51595 6
Luther's Last Battles: politics and polemics, 1531-1546
by Mark U. Edwards, Jr.
E. J. Brill, 60 Guilders
ISBN 90 04 06892 9

Once the party is over, the balloons burst and glitter falling everywhere like autumn leaves, what impressions do the guests retain of such essentially fleeting festivities? Some perhaps will recall a welcome night out, or even, if the host kept good wine flowing, an abiding sense of warm appreciation for hospitality received? Yet applied to the English celebration of Martin Luther's quinquenary, perhaps not?

For instance, and as the BBC would have us believe, was not the Great Reformer merely a heretic who persecuted? And how accurate was the assessment of the media in general when their spotlight largely rested on Dr Martin's protest against the way Roman ecclesiasticism purveyed "cheap grace" in a system of indulgences contrived to guarantee rapid financial return? If as radio and television audiences, magazine and newspaper readers were repeatedly informed, this was Luther's real role, it is surely remarkable that his celebrated stand for conscience before the pomp of power that was the Imperial Parliament should have remained in the memory as anything other than "wrong but wrongminded".

In fact, of course, such insights are as superficial as any reminiscences of the festive spirit; and in two books published five hundred years on the reader can find the depth he needs to prevent his Luther existing as a mere cardboard cut-out. This is not to deny that the sheer idealism of young Luther will continue to intrigue the mind; but rather to insist that the mature Reformer had to persevere with highly-motivated and precisely-organized pastoral ministry if his "redemption of the Gospel" was to make any impact. Certainly the supreme merit of the late Heinrich Bornkamm's *Martin Luther in der Mitte seines Lebens* (1979) - now translated into good English by E. Theodore Bornkamm as *Luther in mid-Career* (1983) - may readily be grasped from the mastery with which biographical narrative selects subjects of concern to lasting impact.

When held in the Wartburg against his will, for example, Luther redeemed the time by translating the whole of the New Testament into easily assimilable German, his very choice of dialect aiding communication. Bornkamm likewise made plain that, for such a conservative Reformer to make any headway, his attitude to fundamentals of the medieval faith like the role of the Blessed Virgin Mary and the nature of the Eucharist had to be clarified. In short, this great book describes something of a self-imposed "summit" as Dr Luther, obliged to come to terms with himself and his no-called protest, took time responsibly to survey the task ahead. For the Reformer was nothing if not an unrelenting "heretic" and in almost seven hundred pages of narrative, he emerges here as an idealist who both persevered and lived on to the challenges and tumults that besieged his ministry between 1521 and 1530. For those years of heated debate with Karlstadt, Miltzer, and Erasmus; years when peasants revolted and nobles strove to secure the status quo against the underdog; and a crucial period of European history when a Catholic emperor battled in sincerity to unite his divided subjects against the Turk. That they were also years when a pastor of genius sought to open the Scriptures to ordinary people in need of basic catechism and instruction in the faith of Christ crucified Bornkamm fully appreciated, his masterful judgment affixing the sources to reveal a Reformer the media normally conceal.

For if Luther genuinely sought to reform theology before finding himself obliged to restructure the whole

church, significant chapters in this definitive episode in biography spell out the care with which he set about such a superhuman task. As analysed in these pages indeed, the sheer achievement of Luther the visionary will register with readers hitherto unaware of what precisely the establishment of early Protestantism involved. After a lifetime's study of both history and theology, Bornkamm was ideally placed to write such a comprehensive and constructive account. That he failed to complete it - seeing as editor his daughter Karin poignantly recorded the fact with words translated "Here the manuscript breaks off" - is a great loss to *Lutherstudien*. But Bornkamm's work stands against the imperceptible as eloquent and triumphant testimony that Luther not only caught his vision of Pauline theology, but also lived to experience for himself in a crowded ministry the teaching conceived in those early years.

If Bornkamm has thus achieved as much for "Luther in mid-career" as Boehmer once claimed for the "young" Luther on route for Reformation, how far does Mark U. Edwards's new book on politics and polemics between 1531 and 1546 lay the keel for a ship capable of sailing the stormy seas of Luther's continuing and culminating voyage? The work of a rising young professor at Purdue, Indiana, this volume is written at an altogether different level, yet its thematic treatment of a man who might nowadays be termed "menopausal Luther" has much to commend it. For what *Luther's Last Battles* lacks in erudition and style is made up for in a topical handling of many problems confronting the mature Reformer in a foggy period of ministry when old enthusiasms are on the wane, with frustration tempering the fervent idealism of yesterday. This is in short the period of debate about the calling of a general council of the church - a time when Luther, in old age, chose to castigate the Jews and finally denounce the papacy. The Wittenberg Reformer who between 1520 and 1530 made such a forceful start in educating the faithful became increasingly conscious later in that decade and in the 1540s that he also had an obligation to attack the unfaithful.

By then, as historians customarily observe, even Luther's physical and intellectual powers were beginning to decline, several scholars whitewashing an angry old man they held to be no longer himself and scarcely responsible for the scurrilous polemics that flowed from his pen. Not so Dr Edwards who finds this Luther still able to take care of himself, particularly if his passion for apocalyptic is taken into account. For some time, Professor Helko Obermann has been convinced that Luther's anti-Jewish writings can only be studied in the constructive context of such apocalyptic and holy

proving in precisely this jealously-guarded preserve of the Tübingen Goliath. Dr Edwards extends an argument he clearly finds appealing. Conscious that he was himself living in the last days of divine dispensation on borrowed time, Luther determined with ebbing energy to invigilate against all diabolical agents, condemning Jews and zealous, the Turk and the papacy in writings that had about them the character of a considered last will and testament together with attendant codicils. After all, the devil deserved all the abuse men could heap upon him, and could only follow an argument if it was couched in the vilest language. Accordingly, when Duke Heinrich of Braunschweig-Wolfenbüttel attacked Elector Johann Friedrich in filthy terms, Luther's sense of loyalty to his secular lord and patron clearly saw the devil in such an adversary, to reply in like coin.

Ad hominem abuse was thus *ad diabolum* attack in a scurrilous entirely lacking subtlety - but for Erasmus and a few of his disciples who followed the Reformation apart, this was the period for polemic of high-sounding fury and very little light. Nor did Luther seek to avoid the issue, on one occasion styling himself "the crude woodcutter who must pioneer and hack out a path", his timid colleague Melancthon likewise holding that the times demanded denunciation of the kind only a Luther's ire could muster.

Whether treating of Jewish Old Testament exegesis or papal history therefore, Martin Luther determined so to discredit the men involved that their message itself would be discarded. Like the prophets, he used harsh words of condemnation with all the freedom of one who realized from the start that he would go unheeded. "I have done my part as a true prophet and preacher. He who does not wish to listen may go his way. I am now excused from this day forward and in eternity." And in the wake of the quinquenary, it is interesting to recall how many will refuse to give Luther any kind of footing because of his attitude to the Jews and the papacy. In the first instance, a curious confusion convinces that Adolf Hitler owed Luther a debt, as if it was the Wittenberg Reformer - alone, instead of almost all Christians and medieval European institutions that persecuted the Jews as usurers. And second, the vicious spirit of much present-day ecumenism has no stomach for outspoken criticism of the Roman papacy, writing off Luther's whole ministry on account of his most forthright tract, that "late-night fire" of his and Paul's crusade, *Against the Papacy at Rome founded by the Devil* (1545). As Dr Edwards is at pains to emphasize, the writing was actually commissioned by Elector Johann Friedrich on the eve of the Council, his Saxon Prince knowing full well Luther's "singular spirit"



"(unique talent) would surely be a better translation of the original) for this kind of political polemicism. He doubtless recalled the devastating way his favourite theologian had cut the Cardinal Albrecht down to size when that notorious Hohenzollern prelate and pluralist moved his treasured collection of relics from the uncertainty of Halle to the safety of Mainz, only to discover "two feathers and an egg of the Holy Ghost" added to the widely-circulating inventory.

Luke Cranach astutely captured the laugh-lines by the eyes of the Luther he sketched in 1545, however much that same artist also conveyed the *gravitas* of a Wittenberg colossus whose writing against the papacy proved immensely destructive. Yet convinced as he was of the battle his Reformation waged against the false church on behalf of the Lord of true Christianity, in addition to the inevitable polemic, Luther's tract contained compelling logic, primitive historical argument and considered scriptural exposition. Cranach was asked to supply illustrations, and reproduced for the reader these gave the argument an even more vivid and lurid hue. That Luther likewise required his printer to authenticate his name below - as if

Peter Newman Brooks is a fellow of Robinson College, Cambridge.

Types of ecstasy

Montaigne and Melancholy: the wisdom of the Essays
by M. A. Screech
Duckworth, £19.50
ISBN 0 7156 1698 6

Professor Screech is widely recognized as the *doyen des études françaises*. His study of *Ecstasy and the Poetics of Folly* has also been hailed, quite rightly, as the best book on Erasmus's personal religion. He has now produced yet another original and important book, this time on Montaigne. Montaigne's attitudes are often very different from those of Erasmus and Rabelais. But the approach adopted here is essentially the same as in Professor Screech's earlier work: he seeks to clarify the thought of a highly original author by setting it in the intellectual milieu in which it was created. The themes at the heart of his book are also familiar, as he himself acknowledges: "When I was studying Erasmus and Rabelais, I was led to find out how Montaigne came to terms with them."

Starting from Montaigne's assertion that his "complexion is between the jovial and the melancholy, moderately sanguine and hot", Professor Screech reminds us that, according to the theory of the humours which underlay a great deal of Renaissance thought, melancholy was widely associated with genius. "Aristotle believed that all geniuses were melancholic; an assertion he explained with the help of Plato; he took the inspiration of the true genius to be a form of ecstatic madness closely allied to the raptures experienced by seers, prophets, poets and lovers." There was, however, a reverse side to the coin. Melancholy could inspire genius, but it could also lead to madness; "No essential distinction could be made; the man who inspired led Hercules to kill his children and the man who inspired Plato of madness. Society the wisest of men, Melancholy was behind them all."

The most famous contemporary example of the dangerous side to melancholy and genius was the author of the *Confessions*, St Augustine. Tasso, with more intuition than sympathy, "had more intuition than sympathy" in seeing him at Ferrara, in a pitiful state, surviving himself, not recognizing himself or his work, a creature of "colours, with which one can attempt to guide oneself through the labyrinthine maze, but they are a better guide than the traditional story"

main condition - hence Professor Screech's subtitle: *the wisdom of the Essays*. Montaigne makes an exception for a select group of saints, those on whom God bestows a special power to commune with him. In all other cases, on the other hand, he shows a pronounced suspicion of those who attempt to use ecstasy as a means of access to higher truths or as a guiding principle in their lives.

Religious zeal of the kind which less worthy men use in order to justify persecution and bigotry is stripped of its prestige. The ancient authorities, who Montaigne's contemporaries often regarded as headstrong from divine inspiration, are brought back to a more human level. Platonic theories of poetic inspiration of the kind espoused by Ronsard are treated as irreverently as the more mundane raptures provided by drink and sex. "As type after type of ecstasy is examined," Professor Screech concludes, "the frontiers of wisdom are strengthened against them." The danger, as Montaigne himself so vividly expressed it, is that, in trying to "rise above humanity", we may end up by becoming beasts rather than angels.

The ideas of genius, melancholy, ecstasy and folly are not the only *filles du dieu* with which one can attempt to guide oneself through the labyrinthine maze, but they are a better guide than the traditional story

of the evolution theory. Thanks to Professor Screech, Montaigne's espousal of the ideal of constancy can now be seen in a wider, more accurate context. Perhaps even more importantly, Professor Screech has demonstrated that it is impossible to arrive at an adequate comprehension of the *Essays* by studying them in a cultural vacuum. He shows just how dependent Montaigne is on the orthodox Christian era that tradition which insists on the fact that man is composed of both body and soul - hence the distrust of ecstasies which ravish the soul from the body and turn *furor* into *folle*. More tellingly still, Professor Screech demonstrates how much Montaigne's thought is influenced by the strange mixture of Aristotelian, Platonic and Christian ideas which dominated the thought of his contemporaries.

His study may make for somewhat heavy reading for those who are not familiar with the classics, but Montaigne is quoted in English, which should help non-French specialists. Professor Screech excels in expounding difficult, often abstruse ideas. His study will easily fulfil its avowed aim of making Montaigne's *Essays* more comprehensible and more enjoyable.

James Supple

Dr Supple is lecturer in French at the University of St Andrews.

BOOKS
Roman images revised

Shakespeare's Roma
by Robert S. Miola
Cambridge University Press, £19.50
ISBN 0 521 25307 1

Custom identifies Shakespeare's Roman plays as those based on Plutarch: *Julius Caesar*, *Antony and Cleopatra* and *Coriolanus*. Yet, as Dr Miola argues, Shakespeare's conception of Rome and his imaginative interest in its history, ethos and literature is much more extensive, spanning his entire career from *The Rape of Lucrece* and *Titus Andronicus* to *Cymbeline*.

This interest involves a continuous and synthetic engagement with certain motifs drawn from classical myth and poetic tradition, central to which is Virgil's (or Vergil's), as Dr Miola prefers to call him, account of the fall of Troy, the besieged city, and the heroic destiny of *pius Aeneas*. In Shakespeare's recurrent echoes and adaptations of certain Virgilian scenes in particular Dr Miola finds the deep sources of his Roman vision, a vision which becomes progressively more critical of those values that "force Romans to lead lives that are increasingly at odds with human instincts and needs".

Such a motif, which "became one of Shakespeare's most fertile poetic acquisitions", is Pyrrhus's invasion of Priam's inner sanctuary and his savage slaughter of the Trojan king upon an altar, recalled by Aeneas in Book II of Virgil's epic. This "sacrilegious intrusion" of the classical epic into the destruction of Troy, serves as a paradigm in Shakespeare's poem for Tarquin's violation of Lucrece, which is presented in terms of the sacking of a city, while in *Titus Andronicus* the rape and mutilation of Lavinia and the subsequent familial revenge is again related to the overthrow of elvish order and justice, as Virgilian, Ovidian and Senecan analogues are woven together to reinforce the Roman context of the play. Involving blood ritual, the denial of the marriage bond and disorder in the city are also associated with each other in *Julius Caesar*, where the Virgilian simile likening the monning Pyrrhus to an emerging snake and another snake-image from *Georgics* II may have prompted Shakespeare to make Brutus in his crucial soliloquy think of Caesar as "the adder" and "a serpent's egg".

Shakespeare's continuing absorption with Virgil in *Antony and Cleopatra* owes less to the motif of the fall of Troy, although Dr Miola claims a reminiscence of the Pyrrhus episode, when Octavius's soldiers force their way into Cleopatra's monument to capture her. More significant are the recollections of Dido and Aeneas, which serve to emphasize Shakespeare's very different view of the conflict between love and duty.

Holding Forster together

A Project for Forster
by Christopher Gille
Longman, £5.95 and £4.25
ISBN 0 582 35315 7 and 35314 9

Two extraordinarily evocative photographs of the novelist reproduced here at the end of this short but ambitious introduction to Forster's fictional world. One at the age of five with his mother, dressed in a velvet little Lord Rutherford suit with ruffles cascading to his ankles; the other in old age in his room at the Strand, looking out his window which falls across the face of a champagne bottle. He looks extremely wise in both.

Christopher Gille describes in detail Forster's family background and the novel's setting in which he grew up, taking the reader back to Mill and

including, of course, Antony's notably un-Virgilian image of those two former lovers reunited in the afterlife. Many of the other parallels invoked, including Mars and Venus, Hercules and Omphale, and the conventional arming of the epic hero, add to the ironic and ambivalent treatment of Roman heroic values in the play.

The critical scrutiny of these values is certainly continued in *Coriolanus*, but the gist of allusion which yields to Dr Miola's mill is relatively thin and lacking in specific point. The comparison between Coriolanus himself and Turnus in the second half of the *Aeneid*, "the warrior hero who belongs on the battlefield, not in the more complex if less exalted space within city walls," does not greatly enhance our understanding of the hero or the play, while it seems unnecessary to cite extracts from Cicero and Quintilian in order to demonstrate at some length that Coriolanus is not a successful orator.

The chapter on *Cymbeline* neatly rounds off the book and its central argument, for here Shakespeare is seen recapitulating his own earliest work and tempering Roman severity with the kinder virtues of the new nation, Britain. *Lucrece* and *Titus*

Andronicus in particular are playfully recalled as Iachimo, that deceitful invader, emerges from his version of the wooden horse in Imogen's bedroom and finds that her bedtime reading has been Ovid's tale of Tereus and Philomela. Tragedy is diverted into comedy as Imogen escapes from Cloten's lustful clutches, chooses disguise rather than death, and, unlike Cleopatra, prefers submission to the invading Romans. Posthumus's Roman sense of honour (the wage like that made by Collatinus) yields to repentance and humility, and he goes to war not for fame and conquest but as an anonymous British peasant, subsequently forgiving his defeated enemy and relinquishing his wish to die after the ghostly family have rallied round him in prison.

Such a farago of classical motifs revised and turned inside out suggest that in *Cymbeline* Shakespeare may well have been looking back upon what Dr Miola describes as "the gloriously slapdash character of Elizabethan classicism".

D. J. Palmer

D. J. Palmer is professor of English at the University of Manchester.



A small mosaic representing travelling musicians taken from *The Cultural History of Rome* by Henri Stierlin, (Aurum, £7.95).

Values in question

Ben Jonson to the First Folio
by Richard Dutton
Cambridge University Press, £15.00 and £4.95
ISBN 0 521 24313 0 and 28596 8

Dr Dutton limits his study to the 1616 folio (apart from the concluding chapter on *Bartholomew Fair*), because it represents Jonson's own selection of his masques, plays, poems, and comedies the image of himself as the universal man of letters by which he wished to be known.

Dr Dutton argues that the whole body of Jonson's mature work has a common moral and social intention and uses throughout the same technique to fulfil it. Jonson's target is the "understanding" man, and his method, after the early plays, is not to lay down the moral law in explicit terms but to embody without comment the different sets of values which force the auditor to ponder and form his own moral judgment. In *Volpone*, for example, the satiric vitality of Volpone himself is strong enough not only to dwarf the rout of his suitors but even to call into question the values of Celia and Bonario, so that an audience is driven to consider what active qualities virtue needs if it is to survive in a corrupt world.

In the *Alchemist*, the "commonwealth" set up by Doll and her fellows presents a more dangerous and universal set of values than we are apt to recognize, since it promises the gratification of everyone's private fantasies. Surly's uncertain virtue is no match for it, and even Lovewit could be called its final victim, since his triumph consists only in the acquisition of Memnon's old iron, and the doubtful blessing of

Dame Pliant for a wife. The play of moral tolerance with which the note seems to end is a deceptive one, as is also the case in *Bartholomew Fair*, where the plea that no one is fit to judge since we are all sons of Adam is, significantly, by the corrupt Quaresimo. Jonson's major comedies in fact seem to raise moral questions rather than provide set answers: they are rhetorical strategies to make an audience think.

Dr Dutton suggests that the poems work in the same way, by the juxtaposition of contrasting portraits and values rather than by overt didacticism. In *The Forest*, for example, "Duke to no only" follows immediately after "To Sicknes"; and in the *Epigrams*, the one to his reverend mentor, the scholar William Camden, is sandwiched between "To Dr Empiric" and "On Court-Worms". In the masques, the systematic exploitation of the anti-masque achieves the same effect, although the main masque with its idealized values functions in a different way, teaching by praise and challenging the royal actors to be worthy of the role they are performing. In Jonson's underlying assumption seems to be that human nature is corrupt, but that it is, nevertheless, a potential for virtue which it is the poet's responsibility to foster. The ultimate moral responsibility rests, however, with the individual himself: there is no place in Jonson's code for the mysteries of grace and divine intervention which are so apparent in Shakespeare's late romances.

His analysis throws new light on the curiously ambiguous morality of Jonson's late plays; but it does not, to my mind, place enough emphasis on the "delight" which Jonson always insists must be the primary quality of comedy, whatever profit may be mixed with it. The end product is to be an audience whose cheeks are "red with laughter", even if sorer considerations subsequently rear their heads. Indeed, the delight and laughter which

Jonson provides are the most positive and unambiguous expression of his own moral beliefs. They spring from his own absolute mastery of his medium and make us conscious of Jonson himself as the centre of his play, the arch-puppeteer manipulating his raw material and shaping the squalid stuff of human greed and corruption into a kind of dance. Jonson's own high art is the demonstration and justification of his faith in the human potential.

This, however, is a minor evil against a book which is stimulating, balanced and very readable. Dr Dutton's work is more than just an introduction to Jonson; it suggests new perspectives on the most familiar works and rehabilitates the neglected

Maurice Evans

Maurice Evans was until recently professor of English at the University of Exeter.

METHUEN

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David Carroll

David Carroll is professor of English at the University of Lancaster.

12 College Close, Sandy, Stralford,
Milton Keynes MK14 4PY, England.
Tel: Milton Keynes 890000 500634/Telex: 829147

BOOKS

Lines of descent

Genetics
by J. R. S. Fincham
John Wright, £12.50
ISBN 0 7236 0661 7

Genes
by Benjamin Lewin
Wiley, £27.85
ISBN 0 471 09316 5

Genetics has now become a popular subject, considered by many sixth-formers contemplating higher education as a new and exciting biological discipline.

During the past five years, two major changes can be identified which I believe are responsible for the widespread acknowledgement that genetics is a subject of major biological and medical significance. First, the revolutionary new techniques of genetic engineering are providing the basis for the industrial production of hitherto scarce and expensive medical, agricultural and food products and for the construction of new organisms tailor-made for specific tasks - for example, the purification of contaminated water, the utilization of waste, and attempts to increase the efficiency of traditional biological processes like fermentation. The commercial importance of these developments has created a considerable demand for graduates trained in genetics and related disciplines.

Second, the accumulation of much new data has provided further proof of the universality of many genetic processes. Genetics as a subject has in fact existed for some time as two major branches - classical genetics (largely concerned with higher organisms) and molecular (or microbial) genetics. This latter, younger branch has followed a pathway overlapping more with biochemistry than its parent discipline, the reasons being that prokaryotes (bacteria and viruses) have small chromosomes containing only a few genes and that it has long been possible to obtain highly purified and concentrated preparations of microbial DNA and RNA suitable for molecular analysis. Recent technical developments, particularly associated with genetic engineering, have now made it possible to isolate equivalent-sized chromosome segments from any organism with the same degree of purity and concentration. The effect of this has been to produce some quite dramatic advances in our knowledge of the molecular genetics of higher organisms (eukaryotes). With this has come a fusion of the two branches of genetics and the realization that an understanding of such complex genetic interactions as those which determine development and evolution is within sight. There is no shortage of ideas, and genetics is now in full swing, being driven to a large extent by the pace at which the technology advances.

These developments have inevitably influenced the way the subject is taught and the supporting textbooks. Although components of genetics are now incorporated into various undergraduate courses, it is taught mainly in two contexts: as courses in genetics, embracing the classical and molecular aspects of the subject and as courses in molecular biology which combine molecular genetics with biochemistry and cell biology. Professor Fincham's book is in the former category, whereas Dr Lewin's is distinctly molecular in outlook. Although they cover some common ground, these two books are written from different viewpoints: they should therefore be considered complementary rather than as competitors. Both are excellent reviews of the subject and, at 600-700 pages, each is a tour de force - both authors managing to synthesize what is now a vast body of complex information into highly readable, coherent and authoritative texts.

Genetics is a geneticist's book, as it is rooted in the concepts of classical genetics and adopts the approach of incorporating the newer molecular aspects of the subject into the classical framework. The line of descent stems from such books as *Principles of Genetics* by Slonim, Dini and Dobzhansky and that model of clarity *General Genetics* by Sturtevant and Owen. Although Professor Fincham enters a competitive field - I have, of course,



Ulmus folio glabro Georg Ehret. Taken from R. H. Richens's *Elm*, a comprehensive monograph on one of the three principal landscape trees of England, published by Cambridge University Press at £35.00. Besides ecology, history, use and distribution, the book also considers the place of the Elm in literature and the visual arts.

bookshelf ten textbooks of the same general type published in the past five years - his excellent textbook succeeds well. This is partly because several important topics have very recently become much clearer for example, transposition, genetic recombination, DNA repair, eukaryotic gene expression and oncogenes - and partly because the author, with his unusual breadth of knowledge and understanding of genetics, is in a better position than most to attempt the fusion of genetics into the single subject that it has become. While reading the book, I was reminded of the direct and unadorned style of his lectures that I listened to over 25 years ago.

Divided into 19 chapters - each ending with a brief summary, selected further reading (mostly review articles) and a set of carefully prepared problems (with full and constructive answers) - the book proceeds from a discussion of the components of heredity (DNA, chromosomes, and the sexual cycle) and eukaryotic chromosome genetics to cytogenetics and the consequences of chromosomal variation. This leads to chapters dealing separately with extrachromosomal heredity, continuous variation and paraxial analysis (incorporating an interesting account of the use of non-sexual methods for the genetic analysis of cells in culture). The molecular aspects of genetics are grouped into a major section of eight chapters devoted to microbial genetics, mutation (chapter 13 is a fine exposition of the enormous value of mutations other than as genetic markers), the methods and applications of genetic engineering and differentiation. The book ends with accounts of population genetics and human genetics, and a selection of primary references.

Genes is an attractively produced book, with large, two-tone diagrams in the style of *Scientific American*. Being concerned with genes rather than genetics, its scope is more limited and correspondingly more detailed. Emphasis is given to the molecular biology of genes: its general approach being reminiscent of J. D. Watson's seminal book on this subject. Ten parts, each consisting of three to five chapters on related topics, cover such major areas as gene structure, protein synthesis, transcription, regulation of DNA (replication, repair and recombination) and the dynamic genome (transposable and mobile elements, gene amplification, transfection and antibody diversity). Each chapter has a short list of references for further reading, and there is a useful glossary at the end of the book.

Eukaryotes and prokaryotes are allocated equal space, again reflecting the recent explosion of data on eukaryotic gene structure and function, particularly valuable sections are those dealing with 'mobile' elements in eukaryotic genomes, RNA processing and the evolution of related sequences. I am not aware of any other textbooks which deal with these topics in such clear-

detail.
Dr Lewin, the editor of *Cell*, has achieved a fine balance of genetics and biochemistry in his writing and has brought together in this single volume the experience gained from his encyclopaedic three-volume treatise on *Gene Expression*.

D. A. Ritchie

D. A. Ritchie is professor of genetics at the University of Liverpool.

Petroleum origins

An Introduction to the Physics and Chemistry of Petroleum
by R. R. F. Kinghorn
Wiley, £19.50
ISBN 0 471 90034 0

Petroleum is a natural resource of considerable general interest, especially in this country, although we have come to take the revenue from the North Sea for granted - somewhat unwise as it will not last all that much longer. All the more reason, therefore, to know what petroleum is and how it is formed and, hence, how we might find more of it.

The past ten years have seen major advances in our understanding of the nature and origin of petroleum. In nature, normally rather separate disciplines, key developments of technique and theory have led to an interplay which has brought petroleum science new confidence and predictive power. What is the current view of the origin of petroleum?

First, organic matter, originated by phytoplankton blooms, was deposited in the bottom sediments of ancient seas, there to be worked over by the bottom living bacteria. Subsequent burial under kilometres of sediments, deposited over millions of years, resulted in the raised temperatures experienced at those depths in the 'cooking', releasing a complex mixture of hydrocarbons - the petroleum - which migrated out and up along faults and other pathways, eventually pooling in the porous rocks of reservoir traps. So much for the 'how' - derived from new chemical knowledge of the nature of the buried organic matter and of the petroleum generated from it. The effects of the raised temperatures in breaking down the organic debris can be followed downwards into the Earth's crust by drilling. A continuity in hydrocarbon generation is found, which usually maximizes three or more kilometres down - the so-called 'oil window'. Below that, carbonization increasingly takes over.

As for 'where', the right deposited in a suitable environment, deposited in the subsurface between continents and the understanding that phase relationships and other phenomena of continuum physics have mislabeled the gap between the pure mathematical literature and the mathematical background of the typical physicist. This book should satisfy a real need. The topological subjects covered include mappings and topological invariants, homotopy, homology, cohomology, fibre bundles, and Morse theory. Applications include Yang-Mills theory (and other gauge theories), symmetry breaking in crystals, defects in ordered media, and Yang-Mills instantons and monopoles. There is also a small amount of 'local' differential geometry, such as exterior differentiation and Lie differentiation, but generally the author introduces only as much as is necessary for subsequent topological theory.

There are no non-topological applications in physics. In this sense this book exactly complements my own *Geometrical Methods of Mathematical Physics* (Cambridge University Press), which concentrates on the differential structure and does little topology.

Much less explored are the consequences of arranging such identical yet different molecules in a crystal lattice. Thus, a paramagnetic species of molecule containing unpaired electrons with electron spin equals plus or minus one half may be arranged in a crystal lattice such that those molecules with spin of plus one half occupy one sub-set of lattice positions and those with spin of minus one half occupy a second sub-set. Whereas x-ray diffraction studies would not distinguish between the two spin types - so that the spin-ordering of the lattice would not be revealed - these arrangements may be revealed by diffraction studies using polarized neutrons. What, then, are the possible relationships between the spatial arrangements revealed by the x-ray and neutron studies?

The idea of differences beyond those of space leads naturally to differences in colour. The difference between spin of plus one half and spin of minus one half corresponds to the difference between two colours, conventionally chosen to be black and white. An additional operation, over and above those appropriate to three dimensions, is required to interconvert objects of different colour or of different spin. Corresponding to the space groups of x-ray crystallography are the colour and white, the gray and the colourless space groups revealed by polarized neutron diffraction. Two colour groups were first discussed in the context of antisymmetry by Shubnikov in 1944; the extension of the concept to other colour groups of crystallography. Importance, the three, four and six colour groups, has followed in the work of Zamorzev (1982). Only the two-colour case is contained within Jaswon and Rose's book, although the title is such that other cases might be expected.

The book is concerned with conventional space groups and the two-colour space groups; the connection is with their derivation and not with their application. Despite its title, about four-fifths of the book is devoted to the classical space groups and about one-fifth to the two-colour groups. The book discusses aspects of the subject commonly by physicists, that the number of the conventional space groups which contain no glide planes or screw axes would be given by the aim of products of the number of crystallographic point groups compatible with each of the seven crystal classes multiplied by the number of Bravais lattices appropriate to the class. This leads to a total of 230, a total to be compared to the 73 'symorphic' space groups which actually occur. Where the other seven come from, the answer will be found in the book - a story of no other source with so detailed an explanation.

I am afraid that I cannot be as warm in my report on much of the rest of the book. Chemists are not listed among the expected readership of the book. Indeed, it is not clear just what book-learned readers are expected to have. Symmetry projections are used but not explained; the transition from symmetry elements to symmetry operations is abrupt and without explanation. Sub-groups appear first in the title of a section but are not discussed; invariant sub-groups are not mentioned although used to the context of the associated factor groups. Symmetry is first a book, (factor group comment or definition, in the next chapter) and the symbol for a group product simply appears, an

equation without definition or use of the term 'direct product'. It is unfortunate that the first equation in the chapter on the mathematical formulation of point groups should contain two printing errors.

Although there are sections of real value, my overall impression is that this book, devoted to a detailed enumeration of space and two-colour space groups but devoid of application, will not have wide appeal. Its *aufbau* approach is attractive, but this is more than offset by the use of ex cathedra statements, which lead to the frequent, but unanswered, question 'why?'

S.F.A. Kettle

S.F.A. Kettle is professor of chemical sciences at the University of East Anglia.

The first three short chapters introduce superconductivity, its applications, and magnet configurations. Those readers for whom this topic is new, however, will probably find it read a simpler but more detailed introduction, as the author rapidly moves on to a series of specialist topics in chapters four to nine. Among other things, these contain accounts of the mechanical properties of superconducting and other materials, cryogenic stabilization, the phenomenon of flux jumping, alternating fields and associated losses, and quenching and protection techniques. The author also provides in this section of the book a fascinating outline of current work on degradation and training. Training is the technical term for the process of repeatedly raising the current in a new magnet until it quenches (reverts to its normal state) and eventually the desired current is achieved. Degradation, on the other hand, is the unexpected quenching of a magnet in service and is due to the onset of thermal and magnetic instability. These related subjects have until recently been surrounded in mystery and are indeed not yet fully understood.

Chapter ten, a short survey of measurement techniques, is followed by a useful chapter on the design of current leads to magnets and methods of supplying the current. Chapter twelve surveys the properties of the two most popular superconducting alloys, niobium-titanium and niobium-tin, and their manufacture, together with a brief mention of some other alloys. The book concludes with an excellent description of the construction of different types of magnet.

Almost inevitably in an advanced book on a complex subject, the presentation does not flow easily from chapter to chapter. Indeed, although from the point of view of some chapters the book could be regarded as a textbook, it is rather a reference book - one of outstanding quality, superbly produced.

R. L. Stoll

R. L. Stoll is reader in electrical engineering at the University of Southampton.

For many years, however, this phenomenon remained a laboratory curiosity because it was found that superconducting metals have a very low tolerance of magnetic fields, so that above a small critical flux density they revert to their normal resistive state. The metals were therefore useless for high-power superconducting magnets, and it was not until the discovery of high-temperature superconducting alloys about 25 years ago that the way opened for the commercial use of superconductivity.

There are now a large number of applications ranging from tiny devices using the Josephson effect, through electrical machines of various types and sizes, superconducting magnets for nuclear magnetic resonance (NMR), body scanners, to the giant magnets used in the particle accelerators and bubble chambers of high-energy physics. Many more applications are under consideration - notably for various types of magnetic separator, very large power station generators, and the magnetic confinement of the plasma in nuclear fusion reactors.

BOOKS

Crystal lattices

Crystal Symmetry: theory of colour crystallography
by M. A. Jaswon and M. A. Rose
Ellis Horwood, Wiley,
1983 and £8.50
ISBN 0 85312 229 6 and 520 1

There are many ways in which molecules can differ in composition or, when two species are composed of the same atoms, by the arrangement of these atoms in space. However, if two molecules are identical in terms of composition and spatial arrangement they may yet differ. These differences, in electronic and nuclear properties, for instance, are an area of considerable current research activity.

Much less explored are the consequences of arranging such identical yet different molecules in a crystal lattice. Thus, a paramagnetic species of molecule containing unpaired electrons with electron spin equals plus or minus one half may be arranged in a crystal lattice such that those molecules with spin of plus one half occupy one sub-set of lattice positions and those with spin of minus one half occupy a second sub-set. Whereas x-ray diffraction studies would not distinguish between the two spin types - so that the spin-ordering of the lattice would not be revealed - these arrangements may be revealed by diffraction studies using polarized neutrons. What, then, are the possible relationships between the spatial arrangements revealed by the x-ray and neutron studies?

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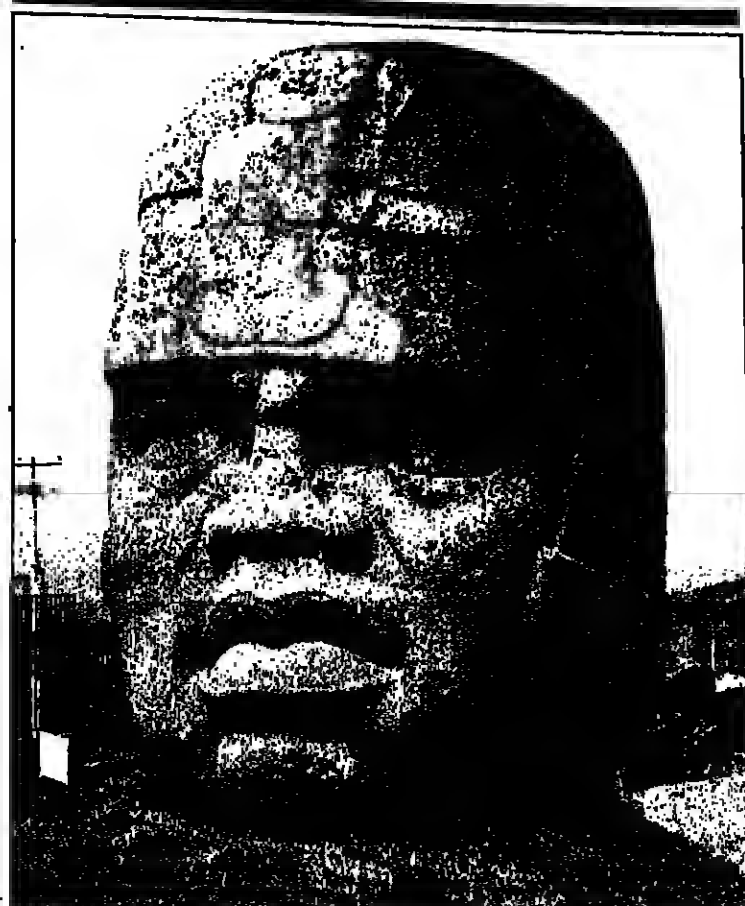
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Ivor Maddox

Ivor Maddox is professor of pure mathematics at the Queen's University of Belfast.

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Although there are sections of real value, my overall impression is that this book, devoted to a detailed enumeration of space and two-colour space groups but devoid of application, will not have wide appeal. Its *aufbau* approach is attractive, but this is more than offset by the use of ex cathedra statements, which lead to the frequent, but unanswered, question 'why?'



A typical Olmec colossal head (height 2.8 metres), at San Lorenzo Tenochtitlan in central Mexico. Taken from *Tula: the Toltec capital of ancient Mexico* by Richard A. Diehl, published by Thames and Hudson at £16.00.

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S.F.A. Kettle

S.F.A. Kettle is professor of chemical sciences at the University of East Anglia.

Powers of attraction

Superconducting Magnets
by Martin N. Wilson
Oxford University Press, £17.50
ISBN 0 19 54805 2

Superconductivity, the complete disappearance of electrical resistance in some metals below a certain very low critical temperature, was discovered by Onnes in 1911. Thus there arose the possibility of carrying current with no ohmic loss and therefore no power consumption, except for the energy required to liquefy the helium which keeps the superconductor below its critical temperature.

For many years, however, this phenomenon remained a laboratory curiosity because it was found that superconducting metals have a very low tolerance of magnetic fields, so that above a small critical flux density they revert to their normal resistive state. The metals were therefore useless for high-power superconducting magnets, and it was not until the discovery of high-temperature superconducting alloys about 25 years ago that the way opened for the commercial use of superconductivity.

There are now a large number of applications ranging from tiny devices using the Josephson effect, through electrical machines of various types and sizes, superconducting magnets for nuclear magnetic resonance (NMR), body scanners, to the giant magnets used in the particle accelerators and bubble chambers of high-energy physics. Many more applications are under consideration - notably for various types of magnetic separator, very large power station generators, and the magnetic confinement of the plasma in nuclear fusion reactors.

Almost inevitably in an advanced book on a complex subject, the presentation does not flow easily from chapter to chapter. Indeed, although from the point of view of some chapters the book could be regarded as a textbook, it is rather a reference book - one of outstanding quality, superbly produced.

R. L. Stoll

R. L. Stoll is reader in electrical engineering at the University of Southampton.

Molecular emphasis

Biochemistry
edited by Geoffrey Zubay
Addison-Wesley, £16.95
ISBN 0 201 09091 0

The enormous and continuing growth of biochemistry during the past thirty years has made the task of writing a single, comprehensive textbook truly Herculean. Indeed it can reasonably be argued that it is no longer possible for one individual to succeed in this task.

Several valiant authors, among them Stryer, Bohinski, Lehninger, Metzler and Rawn, continue the struggle. However, it comes as no surprise that one publisher should try to pool the expertise of many distinguished biochemists in a collective work. *Biochemistry* represents the combined efforts of 26 scholars under the direction of Geoffrey Zubay (Columbia University) as coordinating author. The result is an encyclopaedic text of more than 1200 pages which is both authoritative and up-to-date.

The book's 32 chapters are organized into five parts: protein structure and function; carbohydrate metabolism and the generation of chemical energy; lipids and membranes; nucleic acids and protein metabolism; and special aspects of biochemistry. Coverage in the first four parts is good, and as one might expect of a book with Irving Geis as coauthor, there are many excellent diagrams. All the essential material is included as well as much interesting and useful additional material. Indeed, in some areas instructors and students will need to select topics carefully as the coverage is too deep for many undergraduate courses. The overall emphasis is molecular rather than physiological and if one considers the choice of special topics in part five and the

extensive coverage of gene expression in part four the book could reasonably be described as a molecular biology text with a biochemical emphasis. Thus, although there are only 42 pages on hormone action, a subject often treated in great depth in biochemistry courses, there are 50 each on animal viruses and the origin of life. Indeed, it is generally true that the more clinically related aspects of biochemistry either are not treated at all or are covered in much less depth than the molecular biological aspects.

Given the breadth of biochemistry, there are bound to be disagreements about the topics chosen for inclusion in any textbook and about the relative depth of coverage of each topic included. These problems are compounded by rapid advances in the subject, and it is inevitable that in some areas students will need to consult both specialist monographs and the recent literature to supplement textbook coverage. However, there is undoubtedly a real need for a single comprehensive reference book which undergraduates can use as the framework for their studies. Professor Zubay and his colleagues are to be congratulated on producing an excellent new book that will certainly fill this role for several years.

Despite the large number of contributors, the depth of coverage is consistent and the text is clearly written or a level suitable for final-year undergraduates and research students. It is too advanced for an introductory biochemistry course, for which the shorter texts by Stryer and Bohinski are far more suitable. In the British context it will be most useful for undergraduates taking honours in biochemistry or molecular biology and for MSc and PhD students seeking to strengthen their knowledge of these subjects.

J. R. Coggins

J. R. Coggins is senior lecturer in biochemistry at the University of Glasgow.

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Tutors qualified in: Elementary Mathematics and Modelling (for technology) (TM281), Materials Science (T282), Systems (design, planning and management of social or technical systems), and Engineering Mechanics (Solid) (T232).

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Tutors having teaching experience and qualifications and/or interests in the areas of Energy Policy and Resources, Microprocessors, Water Quality, Materials Science/Metallurgy, Mechanical Engineering, Electrical/Electronic Engineering.

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Tutors with experience of teaching Women's Studies within Higher Education or Adult Education.

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Graduates in Science to work in areas of Biology, Chemistry, Physics, Earth Sciences, Graduates in Science and Engineering to work in areas of Materials Science, Metallurgy, Corrosion, Systems, Chemistry (water quality experiments), Electronics/Computing (Microprocessor activity), Graduates in Mathematics, Science or Technology with some knowledge of Dynamics.

Application Procedures

For further particulars and an application form send a postcard to the Tutor Office (S872), P.O. Box 82, The Open University, Milton Keynes, MK7 6AU. Completed application forms must reach the Open University by Monday 30th January 1984.

UNIVERSITY OF ZIMBABWE

Applications are invited for the following posts:

LECTURESHIP/SENIOR LECTURESHIP:
Department of Modern Languages (French)
The post is for lecturership in French. Applicants must have at least a good first degree and preferably a research qualification. A good knowledge of written and spoken French and a period of residence in France would be a recommendation. Applications are acceptable from candidates with specialisation in any literary or linguistic discipline, but candidates must be prepared to teach in varied specialisations taught by the Department and interest themselves in new proposed courses of a practical nature.

LECTURESHIP/SENIOR LECTURESHIP:
Department of Biological Sciences (2 posts)
Post A: Lectureship in Botany. The successful candidate would be required to contribute to undergraduate courses in general botany and plant anatomy in the Department of Biological Sciences. Applicants from any area of botanical sciences will be considered but the area of special interest in systematic botany. Candidates with experience of the flora of Central and Southern Africa will be of particular interest. Applicants must have a first degree and a PhD and research experience in some aspect of plant science.

Post B: Lectureship in Soil Zoology/Metazoology. The successful candidate should be experienced in the general area of Soil Zoology and/or Nematology. Any area of specialisation within these disciplines will be considered, but particular preference will be given to candidates with research experience with plant-infecting nematodes. He/she will be required to contribute to undergraduate courses in invertebrate zoology, nematology and soil ecology and to supervise postgraduate courses. Applicants should have a first degree and a PhD and research experience in some aspect of plant science and a PhD and research experience in the appropriate area of specialisation.

RESEARCH FELLOWSHIP/RESEARCH FELLOWSHIP:
University Lake Kariba Research Station
(for the period 1st March 1984-28th February 1985)
The successful candidate must be a scientist who will be required to perform studies in the field, "aquatic primary production in Lake Kariba". Applications must be accompanied by a research plan.

Salary Scales:
Senior Lecturer: £217,028 - £490,210/425
Lecturer Grade I: £214,088 - £432,160/190 - £466,166/600
Lecturer Grade II: £208,624 - £408,214/228
Senior Research Fellow: £212,388 - £488,215/672
Research Fellow Grade I: £211,180 - £484,213/170
Research Fellow Grade II: £207,116 - £480,208/59

Appointments on above scales according to qualifications and experience. Conditions of Service: Both permanent and short-term contracts are offered. Persons who are not Zimbabwean citizens may be appointed on a short-term contract basis with an initial period of two years. Short-term contracts may, in exceptional cases, be extended.

Six copies of applications giving full personal particulars (including full name, place and date of birth, education, employment and experience, present salary, date of availability, telephone number, and names and addresses of three referees) should be addressed to: Director, Appointments and Personnel, University of Zimbabwe, P.O. Box MP 107, Mount Pleasant, Harare, Zimbabwe (Telex: 4-162 ZV), from which further particulars are available.

Candidates should send an additional copy of their application to the Association of Commonwealth Universities (ACU), 30 Gordon Square, London WC1H 0PF, from whom further particulars are also available.

Closing date for receipt of applications is 15th January 1984. (16335)

Appointment of Vice-Chancellor

The University is seeking a successor to its Vice-Chancellor, Professor Alan Peacock, who will be leaving in December 1984, after seven years at Buckingham.

The person appointed will be qualified - by experience and ability - to manage the further development of this expanding independent university.

Further particulars of the post may be obtained from the Secretary to the Council, The University of Buckingham, Buckingham MK18 1EG. Those interested in being considered for the post, or wishing to recommend anyone else for consideration, should write to the Chairman of Council, E. W. L. Palmountain, Rags, MA, at the above address, before 16th January 1984.

The University of Buckingham

UNIVERSITY OF SURREY

Department of Electronic and Electrical Engineering SENIOR LECTURESHIP AND 3 LECTURESHIPS

As a result of new developments in the Department, including the establishment of an industrially funded chair in Information Systems Engineering, the following permanent appointments are to be made:

Senior Lecturer and Lecturer in Telecommunications/Satellites/Information Systems
The successful candidate will join a rapidly expanding research group comprising both academic and contract research staff and students. They will be expected to support and extend research as well as make contributions to teaching, especially on a new postgraduate course in Satellite Communications due to start in October 1984.

Lectureship in Optoelectronics
The person appointed will carry out research into the design and applications of integrated optical devices in lithium niobate and/or III-V compounds. He or she will be expected to contribute to the Department's teaching activities. Previous experience in the field would be an advantage but is not essential.

Lectureship in Electronic Engineering
The successful candidate will join one of the Department's research activities not mentioned above (ie control engineering, digital systems, power electronics, microelectronics) and will be expected to contribute to the Department's teaching activities of undergraduate and/or postgraduate level. Previous research and/or industrial experience, whilst not essential, would be an advantage.

Salary for the Senior Lecturer post will be in the range £13,616 - £16,926 per annum, and for the Lecturer posts within the range £7,190 - £14,126 per annum according to age, qualifications and experience. Superannuation under USS conditions.
Further particulars are available from the Academic Registrar (LFG), University of Surrey, Guildford, Surrey GU2 6XH, or telephone 0424 863000 ext 400. Applications from men and women in the form of a curriculum vitae, including the names and addresses of three referees, should be sent to the same address by 10 January 1984 quoting reference 220/THS.

University of Warwick and SERC Daresbury Laboratory LECTURESHIP IN IMAGE ANALYSIS

A Lectureship is available in the University of Warwick Department of Electronic Engineering, SERC Daresbury Laboratory, in the field of image analysis. The post-holder will be expected to contribute to the Department's teaching activities and to carry out research in the field of image analysis, including the development of computer systems for image processing and related fields. He/she will be expected to teach in the Department of Electronic Engineering, SERC Daresbury Laboratory, and to carry out research in the field of image analysis, including the development of computer systems for image processing and related fields.

The appointment will be for a fixed period of two years commencing on 1st September 1984. The salary scale for this post is £17,160 - £27,160 per annum according to age, qualifications and experience. Superannuation under USS conditions. Further particulars are available from the Academic Registrar, University of Warwick, Coventry CV4 7AL, or telephone 0273 650000 ext 400. Applications from men and women in the form of a curriculum vitae, including the names and addresses of three referees, should be sent to the same address by 10 January 1984.

University of Reading Department of Geography Research Officer

The University of Reading is seeking a Research Officer for a full-time post in the Department of Geography. The successful candidate will be expected to contribute to the Department's teaching activities and to carry out research in the field of geography, including the development of computer systems for image processing and related fields.

Further particulars are available from the Academic Registrar, University of Reading, Whiteknights, Reading RG6 2AA, or telephone 0734 611111 ext 400. Applications from men and women in the form of a curriculum vitae, including the names and addresses of three referees, should be sent to the same address by 10 January 1984.

University of Edinburgh WATSON GORDON CHAIR OF FINE ART

The University of Edinburgh is seeking a successor to its Vice-Chancellor, Professor Alan Peacock, who will be leaving in December 1984, after seven years at Buckingham.

Universities continued

AUSTRALIA

Applications are invited for the following posts for which applications close on the date shown. SALARIES (unless otherwise stated) are as follows:

Professor \$44,807; **Research Fellow** \$14,445; **Senior Lecturer** \$13,365; **Lecturer** \$12,285; **Assistant Lecturer** \$11,205; **Further details** and application procedures may be obtained from the Association of Commonwealth Universities (ACU), 30 Gordon Square, London WC1H 0PF, from which further particulars are available.

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Applications are invited for the following posts for which applications close on the date shown. SALARIES (unless otherwise stated) are as follows:

Professor \$44

Universities continued



CHAIR OF EDUCATION

Applications are invited for an additional Chair of Education in the Department of Education. Applicants should have a broad outlook on educational issues and experience of the practical needs of teaching and the education service. More specifically they should be qualified in some aspect of the field of educational communication with particular reference to language.

Further details may be obtained from the Secretary and Registrar, The University, Southampton, Hampshire SO9 5NH, to whom applications (10 copies from applicants in the U.K.) should be sent before 13th January, 1984. Please quote Ref: THES. (10382)



DEPARTMENT OF ECONOMICS

Applications are invited for the post of Lecturer in the Department of Economics. Candidates should be qualified at least to graduate level in an appropriate subject but may have teaching and research interests in any field of Economics. The appointment will be made on salary scale £7,100-£450 (15)-£14,125 per annum. The initial salary will depend on qualifications and experience.

Further particulars may be obtained from C. A. S. Copland, The University, Southampton SO9 5NH to whom applications (7 copies from U.K. applicants) should be sent no later than 7th January, 1984. Quoting reference 162/A/THES. (10374)

University of Wales Prifysgol Cymru UNIVERSITY FELLOWSHIPS

A limited number of Fellowshipships are offered by the University in association with the Institute of Education for the purpose of enabling students to undertake research in the field of education.

The Fellowshipships, tenable for two years from 1 September 1984, are offered to students who have completed a first degree in a relevant subject and who are recommended by the University for research in the field of education.

The stipend will normally be £2,700 in the first year and £2,850 in the second year.

Applicants should submit a detailed statement of their research interests and a list of references to the Registrar, The University of Wales, Prifysgol Cymru, Aberystwyth, Ceredigion, Wales, SY23 3DA.

The University of Lancaster DEPARTMENT OF PHYSICS RESEARCH IN MICROWAVES AND SIGNAL PROCESSING CIRCUITRY

Applications are invited for research in the Department of Physics, Lancaster University. The research is in the field of microwaves and signal processing circuitry.

A salary up to £11,000 could be available for a suitable candidate. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Lancaster, Bailrigg, Lancaster LA1 4YW, where applications should be sent before 1 January 1984. HI

University of Bristol LECTURESHIP IN MUSIC

Applications are invited for a Lectureship in Music in the Department of Music, University of Bristol. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Bristol, 8 Woodland Road, Bristol BS8 1UJ, where applications should be sent before 1 January 1984. HI

University of Hong Kong LECTURESHIPS IN ECONOMICS

Applications are invited for two Lectureships in Economics in the Department of Economics, University of Hong Kong. The positions are available for two years from 1 April 1984.

At current rates, salaries for Lectureships in Economics range from \$100,000 to \$150,000 per annum.

Further particulars may be obtained from the Registrar, The University of Hong Kong, The Chinese University of Hong Kong, Shatin, New Territories, Hong Kong.

Belfast The Queen's University DEPARTMENT OF CIVIL ENGINEERING LECTURESHIP

Applications are invited for a Lectureship in Civil Engineering in the Department of Civil Engineering, The Queen's University, Belfast. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The Queen's University, Belfast, where applications should be sent before 1 January 1984. HI

La Trobe University Melbourne, Australia SCHOOL OF EDUCATION LECTURESHIP IN COMPUTERS AND EDUCATION (Fixed term 4 years)

Applications are invited for a Lectureship in Computers and Education in the School of Education, La Trobe University, Melbourne, Australia. The position is available for a fixed term of 4 years from 1 April 1984.

Further particulars may be obtained from the Registrar, La Trobe University, Melbourne, where applications should be sent before 1 January 1984. HI

University of Reading DEPARTMENT OF MATHEMATICS TEMPORARY LECTURESHIP IN APPLIED MATHEMATICS

Applications are invited for a Temporary Lectureship in Applied Mathematics in the Department of Mathematics, University of Reading. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Reading, Whiteknights, Reading RG6 2AA, where applications should be sent before 1 January 1984. HI

Durham University Business School SMALL BUSINESS STUDIES

Applications are invited for a Lectureship in Small Business Studies in the Business School, Durham University. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Durham University, Leazes Road, Durham, where applications should be sent before 1 January 1984. HI

University of Birmingham DEPARTMENT OF PSYCHOLOGY LECTURESHIP IN CLINICAL PSYCHOLOGY

Applications are invited for a Lectureship in Clinical Psychology in the Department of Psychology, University of Birmingham. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Birmingham, Edgbaston, Birmingham B15 2TT, where applications should be sent before 1 January 1984. HI

Victoria University of Wellington NEW ZEALAND STUDENT COUNSELLOR

Applications are invited for a Student Counsellor in the Department of Student Services, Victoria University of Wellington, New Zealand. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Victoria University of Wellington, Wellington, New Zealand, where applications should be sent before 1 January 1984. HI

Griffith University Brisbane, Australia SCHOOL OF SCIENCE LECTURESHIP IN SCIENCE TECHNOLOGY AND SOCIETY (50% fractional continuing appointment) (READVISED)

Applications are invited for a Lectureship in Science, Technology and Society in the School of Science, Griffith University, Brisbane, Australia. The position is available for a 50% fractional continuing appointment from 1 April 1984.

Further particulars may be obtained from the Registrar, Griffith University, Brisbane, where applications should be sent before 1 January 1984. HI

University of Edinburgh LECTURESHIP IN ECONOMICS

Applications are invited for a Lectureship in Economics in the Department of Economics, University of Edinburgh. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Edinburgh, Edinburgh, where applications should be sent before 1 January 1984. HI

University of Cardiff WARDEN

Applications are invited for a Warden in the Department of Student Services, University of Cardiff. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Cardiff, Cardiff, where applications should be sent before 1 January 1984. HI

University of London Queen Mary College LIBRARIAN

Applications are invited for a Librarian in the Department of Library Services, Queen Mary College, University of London. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Queen Mary College, University of London, where applications should be sent before 1 January 1984. HI

University of Liverpool Sub-Department of Social Science LECTURESHIP IN SOCIAL WORK

Applications are invited for a Lectureship in Social Work in the Sub-Department of Social Science, University of Liverpool. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Liverpool, Liverpool, where applications should be sent before 1 January 1984. HI

University of Oxford New College OFFICIAL FELLOWSHIP IN LAW

Applications are invited for an Official Fellowship in Law in the Department of Law, New College, University of Oxford. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, New College, University of Oxford, Oxford, where applications should be sent before 1 January 1984. HI

University of Bath School of Chemistry LECTURESHIPS

Applications are invited for Lectureships in Chemistry in the School of Chemistry, University of Bath. The positions are available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Bath, Bath, where applications should be sent before 1 January 1984. HI

Edinburgh University Research Unit in Health and Behavioural Change SENIOR RESEARCH FELLOW/RESEARCH FELLOW

Applications are invited for a Senior Research Fellow or Research Fellow in the Research Unit in Health and Behavioural Change, Edinburgh University. The positions are available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Edinburgh University, Edinburgh, where applications should be sent before 1 January 1984. HI

University of Edinburgh LECTURESHIP IN ECONOMICS

Applications are invited for a Lectureship in Economics in the Department of Economics, University of Edinburgh. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Edinburgh, Edinburgh, where applications should be sent before 1 January 1984. HI

University of Cardiff WARDEN

Applications are invited for a Warden in the Department of Student Services, University of Cardiff. The position is available for two years from 1 April 1984.

University of Newcastle upon Tyne CHAIR OF MUSIC

Applications are invited for a Chair of Music in the Department of Music, University of Newcastle upon Tyne. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Newcastle upon Tyne, Newcastle upon Tyne, where applications should be sent before 1 January 1984. HI

University of London Queen Mary College LECTURESHIP IN ECONOMICS

Applications are invited for a Lectureship in Economics in the Department of Economics, Queen Mary College, University of London. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Queen Mary College, University of London, where applications should be sent before 1 January 1984. HI

University of Warwick TEMPORARY LECTURESHIP IN LAW

Applications are invited for a Temporary Lectureship in Law in the Department of Law, University of Warwick. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Warwick, Coventry, where applications should be sent before 1 January 1984. HI

University of Birmingham Faculty of Commerce and Social Science DEPARTMENT OF INDUSTRIAL ECONOMICS AND BUSINESS LECTURESHIP

Applications are invited for a Lectureship in Industrial Economics and Business in the Department of Industrial Economics and Business, University of Birmingham. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Birmingham, Edgbaston, Birmingham B15 2TT, where applications should be sent before 1 January 1984. HI

University of Bath School of Chemistry LECTURESHIPS

Applications are invited for Lectureships in Chemistry in the School of Chemistry, University of Bath. The positions are available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Bath, Bath, where applications should be sent before 1 January 1984. HI

University of Edinburgh Research Unit in Health and Behavioural Change SENIOR RESEARCH FELLOW/RESEARCH FELLOW

Applications are invited for a Senior Research Fellow or Research Fellow in the Research Unit in Health and Behavioural Change, Edinburgh University. The positions are available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Edinburgh University, Edinburgh, where applications should be sent before 1 January 1984. HI

University of Edinburgh LECTURESHIP IN ECONOMICS

Applications are invited for a Lectureship in Economics in the Department of Economics, University of Edinburgh. The position is available for two years from 1 April 1984.

University of London Queen Mary College LECTURESHIP IN ECONOMICS

Applications are invited for a Lectureship in Economics in the Department of Economics, Queen Mary College, University of London. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Queen Mary College, University of London, where applications should be sent before 1 January 1984. HI

University of Wales Saint David's University College LECTURESHIP IN CLASSICS

Applications are invited for a Lectureship in Classics in the Department of Classics, Saint David's University College, Lampeter. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Saint David's University College, Lampeter, where applications should be sent before 1 January 1984. HI

University of Warwick TEMPORARY LECTURESHIP IN LAW

Applications are invited for a Temporary Lectureship in Law in the Department of Law, University of Warwick. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Warwick, Coventry, where applications should be sent before 1 January 1984. HI

University of Birmingham Faculty of Commerce and Social Science DEPARTMENT OF INDUSTRIAL ECONOMICS AND BUSINESS LECTURESHIP

Applications are invited for a Lectureship in Industrial Economics and Business in the Department of Industrial Economics and Business, University of Birmingham. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Birmingham, Edgbaston, Birmingham B15 2TT, where applications should be sent before 1 January 1984. HI

University of Bath School of Chemistry LECTURESHIPS

Applications are invited for Lectureships in Chemistry in the School of Chemistry, University of Bath. The positions are available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Bath, Bath, where applications should be sent before 1 January 1984. HI

University of Edinburgh Research Unit in Health and Behavioural Change SENIOR RESEARCH FELLOW/RESEARCH FELLOW

Applications are invited for a Senior Research Fellow or Research Fellow in the Research Unit in Health and Behavioural Change, Edinburgh University. The positions are available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Edinburgh University, Edinburgh, where applications should be sent before 1 January 1984. HI

University of Edinburgh LECTURESHIP IN ECONOMICS

Applications are invited for a Lectureship in Economics in the Department of Economics, University of Edinburgh. The position is available for two years from 1 April 1984.

Fellowships continued

University of Cambridge Emmanuel College FELLOWSHIP IN MUSIC

The College invites applications for a Fellowship in Music in the Department of Music, Emmanuel College, University of Cambridge. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Emmanuel College, University of Cambridge, where applications should be sent before 1 January 1984. HI

University of Wales Saint David's University College LECTURESHIP IN CLASSICS

Applications are invited for a Lectureship in Classics in the Department of Classics, Saint David's University College, Lampeter. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Saint David's University College, Lampeter, where applications should be sent before 1 January 1984. HI

University of Warwick TEMPORARY LECTURESHIP IN LAW

Applications are invited for a Temporary Lectureship in Law in the Department of Law, University of Warwick. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Warwick, Coventry, where applications should be sent before 1 January 1984. HI

University of Birmingham Faculty of Commerce and Social Science DEPARTMENT OF INDUSTRIAL ECONOMICS AND BUSINESS LECTURESHIP

Applications are invited for a Lectureship in Industrial Economics and Business in the Department of Industrial Economics and Business, University of Birmingham. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Birmingham, Edgbaston, Birmingham B15 2TT, where applications should be sent before 1 January 1984. HI

University of Bath School of Chemistry LECTURESHIPS

Applications are invited for Lectureships in Chemistry in the School of Chemistry, University of Bath. The positions are available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Bath, Bath, where applications should be sent before 1 January 1984. HI

University of Edinburgh Research Unit in Health and Behavioural Change SENIOR RESEARCH FELLOW/RESEARCH FELLOW

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Further particulars may be obtained from the Registrar, Edinburgh University, Edinburgh, where applications should be sent before 1 January 1984. HI

Further particulars may be obtained from the Registrar, Edinburgh University, Edinburgh, where applications should be sent before 1 January 1984. HI

University of Aberdeen RESEARCH FELLOWSHIP IN NORTHERN SCOTTISH HISTORY

Applications are invited for a Research Fellowship in Northern Scottish History in the Department of History, University of Aberdeen. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, The University of Aberdeen, Aberdeen, where applications should be sent before 1 January 1984. HI

Oxford Centre for Postgraduate Hebrew Studies RESEARCH FELLOWSHIP IN HEBREW AND JEWISH STUDIES

Applications are invited for a Research Fellowship in Hebrew and Jewish Studies in the Oxford Centre for Postgraduate Hebrew Studies. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Oxford Centre for Postgraduate Hebrew Studies, Oxford, where applications should be sent before 1 January 1984. HI

Nicer RESEARCH FELLOW

Applications are invited for a Research Fellow in the Department of Education, Nicer. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Nicer, where applications should be sent before 1 January 1984. HI

South Bank Polytechnic ASSISTANT DIRECTOR: ADMINISTRATION

South Bank Polytechnic is looking for an Assistant Director: Administration. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, South Bank Polytechnic, London SE1 0AA, where applications should be sent before 1 January 1984. HI

Bristol Polytechnic DEPARTMENT OF BUSINESS STUDIES LECTURESHIP IN BUSINESS POLICY/ENVIRONMENT

Applications are invited for a Lectureship in Business Policy/Environment in the Department of Business Studies, Bristol Polytechnic. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Bristol Polytechnic, Bristol, where applications should be sent before 1 January 1984. HI

Sunderland Polytechnic DEPARTMENT OF ELECTRICAL ENGINEERING RESEARCH ASSISTANT (MACHINE VISION)

Applications are invited for a Research Assistant in Machine Vision in the Department of Electrical Engineering, Sunderland Polytechnic. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Sunderland Polytechnic, Sunderland, where applications should be sent before 1 January 1984. HI

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ROBERT GORDON'S INSTITUTE OF TECHNOLOGY, ABERDEEN GRAY'S SCHOOL OF ART DEPARTMENT OF FINE ART

Applications are invited for a Lectureship in Sculpture in the Department of Fine Art, Robert Gordon's Institute of Technology, Aberdeen. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Robert Gordon's Institute of Technology, Aberdeen, where applications should be sent before 1 January 1984. HI

Oxford Centre for Postgraduate Hebrew Studies RESEARCH FELLOWSHIP IN HEBREW AND JEWISH STUDIES

Applications are invited for a Research Fellowship in Hebrew and Jewish Studies in the Oxford Centre for Postgraduate Hebrew Studies. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Oxford Centre for Postgraduate Hebrew Studies, Oxford, where applications should be sent before 1 January 1984. HI

Nicer RESEARCH FELLOW

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Further particulars may be obtained from the Registrar, Nicer, where applications should be sent before 1 January 1984. HI

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Further particulars may be obtained from the Registrar, South Bank Polytechnic, London SE1 0AA, where applications should be sent before 1 January 1984. HI

Bristol Polytechnic DEPARTMENT OF BUSINESS STUDIES LECTURESHIP IN BUSINESS POLICY/ENVIRONMENT

Applications are invited for a Lectureship in Business Policy/Environment in the Department of Business Studies, Bristol Polytechnic. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Bristol Polytechnic, Bristol, where applications should be sent before 1 January 1984. HI

Sunderland Polytechnic DEPARTMENT OF ELECTRICAL ENGINEERING RESEARCH ASSISTANT (MACHINE VISION)

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Further particulars may be obtained from the Registrar, Sunderland Polytechnic, Sunderland, where applications should be sent before 1 January 1984. HI

Further particulars may be obtained from the Registrar, Sunderland Polytechnic, Sunderland, where applications should be sent before 1 January 1984. HI

Coventry (Lanchester) Polytechnic DEPARTMENT OF MATHEMATICS RESEARCH ASSISTANT

Applications are invited for a Research Assistant in the Department of Mathematics, Coventry (Lanchester) Polytechnic. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Coventry (Lanchester) Polytechnic, Coventry, where applications should be sent before 1 January 1984. HI

Oxford Centre for Postgraduate Hebrew Studies RESEARCH FELLOWSHIP IN HEBREW AND JEWISH STUDIES

Applications are invited for a Research Fellowship in Hebrew and Jewish Studies in the Oxford Centre for Postgraduate Hebrew Studies. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Oxford Centre for Postgraduate Hebrew Studies, Oxford, where applications should be sent before 1 January 1984. HI

Nicer RESEARCH FELLOW

Applications are invited for a Research Fellow in the Department of Education, Nicer. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Nicer, where applications should be sent before 1 January 1984. HI

South Bank Polytechnic ASSISTANT DIRECTOR: ADMINISTRATION

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Further particulars may be obtained from the Registrar, South Bank Polytechnic, London SE1 0AA, where applications should be sent before 1 January 1984. HI

Bristol Polytechnic DEPARTMENT OF BUSINESS STUDIES LECTURESHIP IN BUSINESS POLICY/ENVIRONMENT

Applications are invited for a Lectureship in Business Policy/Environment in the Department of Business Studies, Bristol Polytechnic. The position is available for two years from 1 April 1984.

Further particulars may be obtained from the Registrar, Bristol Polytechnic, Bristol, where applications should be sent before 1 January 1984. HI

Sunderland Polytechnic DEPARTMENT OF ELECTRICAL ENGINEERING RESEARCH ASSISTANT (MACHINE VISION)

Applications are invited for a Research Assistant in Machine Vision in the Department of Electrical Engineering, Sunderland Polytechnic. The position is available for two years from 1 April 1984.

Administration continued

THE LAW SOCIETY

Continuing Education Officer

£14,317-£21,249 p.a.

Applications are invited for this appointment which has been created following the approval by the Council of The Law Society of a scheme of compulsory continuing education.

The successful applicant will be responsible to the Secretary, Education and Training for establishing, implementing and monitoring the scheme which will provide for a 3 year programme for newly qualified solicitors and will become compulsory for those admitted after 1st August, 1985.

Essential requirements for the post include a combination of good administrative experience and the ability to communicate effectively with the various academic and other bodies providing continuing education. Applicants should be solicitors admitted in England and Wales and preferably have had experience of teaching law in an institution of higher education. Starting salary will be at a point on the above scale depending on qualifications and experience.



Applications including detailed curriculum vitae should be addressed to the Personnel and Training Manager, The Law Society, 113 Chancery Lane, London WC2A 1PL, and should be submitted no later than Friday, 23rd December, 1983.

(18387)

Department of Education and Science

HM Inspectors of Schools

Applications for appointment as HM Inspectors of Schools are invited from men and women preferably aged between 35 and 45, with experience in the education of pupils and students with special educational needs, particularly those arising from:

physical or visual handicaps;
emotional and behavioural disorders;
moderate or severe learning difficulties.

HM Inspectors of Schools are part of both general and specialist assignments and provide professional advice to the Department and throughout the educational system.

Applicants must have good specialist qualifications, substantial teaching experience in either special or ordinary schools and colleges, and a broad interest in the development of general education for those with learning difficulties.

Starting salary, with effect from 1st January, 1984, will be within the range £15,800-£20,700 (higher in London). Relocation expenses of up to £3,000 may be payable. Application forms (to be returned as soon as possible and not later than 30th December, 1983) and further information may be obtained from Mr E. D. Foster, Department of Education and Science, Room 16/17, Elizabeth House, 39 York Road, London SE1 7PH, telephone 01-928 9222, Extensions 2786 or 2237. Please quote 14/83.

(18376)

University of Aston

Birmingham

Administrative Assistant

Applications are invited from graduates with good administrative and organizational skills for the post of Administrative Assistant in the Department of Education and Science. The post involves the coordination of administrative and clerical work in the Department. The successful candidate will be responsible for the day-to-day running of the Department and will be expected to handle a wide range of administrative tasks. The post is a full-time position and the successful candidate will be expected to work full-time hours. The salary for this post is £14,317-£21,249 p.a. Applications should be sent to the Personnel and Training Manager, The Law Society, 113 Chancery Lane, London WC2A 1PL, and should be submitted no later than Friday, 23rd December, 1983.

The appointment is for a year salary £14,317-£21,249 p.a. Applications should be sent to the Personnel and Training Manager, The Law Society, 113 Chancery Lane, London WC2A 1PL, and should be submitted no later than Friday, 23rd December, 1983.

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Colleges of Higher Education

LONDON BOROUGH OF HARROW
HARROW COLLEGE OF HIGHER EDUCATION

Applications are invited from suitably qualified candidates for the following challenging senior management appointments in the College:

DEAN OF THE FACULTY OF ART AND PHOTOGRAPHY
(Grade VI and Faculty and London Allowances)

DEAN OF THE FACULTY OF BUSINESS AND MANAGEMENT
(Grade VI and Faculty and London Allowances)

HEAD OF THE SCHOOL OF SCIENCES
(Associate Dean)

(Grade V and London Allowances—with the possibility of appointment to the post of Dean of the Faculty of Science and Technology)

Deans of Faculties and the Associate Dean are members of the College Management Board and of the Academic Board. They provide academic and resource leadership for the development of courses and subjects which comprise the Faculty programmes.

Applicants should be fully conversant with the requirements of the main visiting bodies in the public sector of higher education: CMAA, BTEC.

Salary scales: Grade VI: £16,832-£18,327 with Faculty and London Allowances.
Grade V: £15,300-£17,051 with London Allowances.

For further information concerning the appointment of interest to you (please specify) and application form please apply to The Principal, Harrow College of Higher Education, Watford Road, Northwick Park, Harrow HA1 3TP (telephone: 01-884 5422 Extn. 232) to whom completed applications are to be returned by 18th January, 1984.

Harrow is an Equal Opportunities Employer. (18381)

NIHE
NATIONAL INSTITUTE FOR HIGHER EDUCATION DUBLIN

Applications are invited for the post of:

Assistant Lecturer
in Communications

The School of Communications, has its own television, sound, graphics, print and photography studios, together with access to the Institute's computing and recording resources. The School has responsibility for the BA (Hons) programme in Communication Studies, a Graduate Diploma in Journalism, post-graduate research studies and a variety of services teaching in other Faculties. The School has recently obtained substantial EEC funding for research into information technology.

The School seeks candidates in all areas of communications but is particularly interested in candidates with interests in one or more of the following: Journalism; Communication Theory and Research Methods; Media Sociology; Social and Organisational Psychology; Informatics; International Communication; Advertising; Public Relations and Media Production.

Candidates should be well qualified academically and in addition have substantial research interests and ideally should have had industrial/business, academic or research experience. It is hoped that the post would be taken up by the successful candidate by October, 1984 at the latest. Candidates are expected to have obtained a post-graduate qualification by that date are invited to apply at this time.

Salary Scale: IRC 781 - £11,835
Application forms and further details are available on written request from The Personnel Office, National Institute for Higher Education, Glasnevin, Dublin 9, to whom they should be returned by 9th January, 1984.

Suffolk College

of Higher and Further Education

These vacancies, effective from 1st May, 1984, arise from the impending retirement of the existing Heads.

HEAD OF DEPARTMENT OF ART AND DESIGN

A grade IV Department with potential for growth in the provision of a range of currently approved DATC National Certificate, Diploma and Higher Diploma courses in General Art and Design, Graphic Design, Illustration, Film and TV Design, Exhibition and Stage Design.

HEAD OF DEPARTMENT OF CONSTRUCTION

A grade IV Department providing an established range of courses at craft, technician, and professional levels.

Salary, both posts: Head of Department Grade IV £14,148 to £15,449

Application forms and further particulars from the Principal, Suffolk College, Rope Walk, Ipswich IP4 1LY, to whom they should be returned within fourteen days of this advertisement. Please enclose a stamped addressed envelope.

NIHE is an equal opportunities employer. (18381)

Centerbury
Christ Church College of
Higher EducationLECTURER IN
INFANT EDUCATION

Applications are invited from suitably qualified candidates for an appointment as Lecturer in Infant Education in the Department of Infant Education. The successful candidate will be responsible for the development of the infant education programme and will be expected to teach and supervise the infant education staff. The post is a full-time position and the successful candidate will be expected to work full-time hours. The salary for this post is £14,317-£21,249 p.a. Applications should be sent to the Personnel and Training Manager, The Law Society, 113 Chancery Lane, London WC2A 1PL, and should be submitted no later than Friday, 23rd December, 1983.

The college offers B.A. and B.Sc. degrees, PGCE, advanced diploma and higher degrees in Education.

Salary: Lecturer £17,815 - £18,445 p.a.

For further details write to Mrs Joan Long, Personnel and Training Manager, Christ Church College, Canterbury, Kent CT1 3AP (telephone: 01843 5422 Extn. 232) to whom completed applications are to be returned by 18th January, 1984.

Christ Church College is an Equal Opportunities Employer.

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Librarians

University of Wales

Saint David's University College

Assistant Librarian

Applications are invited from suitably qualified candidates for an appointment as Assistant Librarian in the Department of Library Services. The successful candidate will be responsible for the development of the library service and will be expected to teach and supervise the library staff. The post is a full-time position and the successful candidate will be expected to work full-time hours. The salary for this post is £14,317-£21,249 p.a. Applications should be sent to the Personnel and Training Manager, The Law Society, 113 Chancery Lane, London WC2A 1PL, and should be submitted no later than Friday, 23rd December, 1983.

The college offers B.A. and B.Sc. degrees, PGCE, advanced diploma and higher degrees in Education.

Salary: Lecturer £17,815 - £18,445 p.a.

For further details write to Mrs Joan Long, Personnel and Training Manager, Christ Church College, Canterbury, Kent CT1 3AP (telephone: 01843 5422 Extn. 232) to whom completed applications are to be returned by 18th January, 1984.

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Colleges of Further Education

ilea Inner London
Education AuthorityLONDON COLLEGE OF FASHION
20 John Prince's Street, London W1

Applications are invited for the following posts:

Head of Department V
of Hairdressing & Beauty Therapy

The Governors invite applications for the post of Head of Department of Hairdressing & Beauty Therapy which has become vacant following the death of Mr L. Santoro. Applicants should have appropriate qualifications and experience in a post of comparable responsibility in industry and/or Further/Higher Education.

Salary in accordance with Burnham (FE) agreement on a scale £15,390-£17,091 (plus £987 Inner London Allowance). Further information and application forms, returnable within 14 days of this advertisement, from Senior Administrative Officer, London College of Fashion, 9/12 Barrett Street, London W1.

ILEA is an equal opportunities employer. (18381)

Inner London
Education AuthorityLondon College of
Printing

Design Department
Applications are invited for the following posts:

Principal Lecturer in
Graphic and Typographic
Design

Course leader of the DATC Higher Diploma in Graphic Design. The successful candidate will be responsible for the development of the course and will be expected to teach and supervise the staff. The post is a full-time position and the successful candidate will be expected to work full-time hours. The salary for this post is £14,317-£21,249 p.a. Applications should be sent to the Personnel and Training Manager, The Law Society, 113 Chancery Lane, London WC2A 1PL, and should be submitted no later than Friday, 23rd December, 1983.

On an incremental scale with the range of £15,390-£17,091 (plus £987 Inner London Allowance). Further information and application forms, returnable within 14 days of this advertisement, from Senior Administrative Officer, London College of Fashion, 9/12 Barrett Street, London W1.

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Research
& StudentshipsUniversity of
Cambridge

St John's College

THE NORMAN
LASKE SENIOR
STUDENTSHIP

St John's College is offering a Senior Studentship in the Department of Public Law. The successful candidate will be responsible for the development of the course and will be expected to teach and supervise the staff. The post is a full-time position and the successful candidate will be expected to work full-time hours. The salary for this post is £14,317-£21,249 p.a. Applications should be sent to the Personnel and Training Manager, The Law Society, 113 Chancery Lane, London WC2A 1PL, and should be submitted no later than Friday, 23rd December, 1983.

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Research & Studentships continued

SOCIAL SCIENCE RESEARCH
COUNCILComparative Research
in Government and
Industry Relations

The SSRC proposes to launch a major research initiative in the field of government-industry relations. Individual researchers, research institutes and centres in the social sciences and related disciplines are invited to submit proposals for funds to undertake research on a project or projects within a programme of research whose principal focus is the study of institutions and organizational structures and the linkages between them. Cross-sectional and cross-national comparisons will be incorporated into the design of the programme from its inception, but not necessarily into each individual project. Research commissioned will therefore include the study of an industry or industries chosen from, inter alia, telecommunications, pharmaceuticals, and robotics; textiles, building and building components, and steel.

Proposals for the researching of other industries in which the applicant has an interest will also be considered. The main countries chosen for comparison will be the UK, which will probably be, in the first instance, France and West Germany, although an applicant may offer for consideration by the SSRC other European industrialized countries of which they have knowledge and research experience.

For further details and outline specifications of the research write to: Paul Winter, Secretary, Government and Industry Relations Sub-Committee, SSRC, 1 Temple Avenue, London EC4Y 0RD. (18385)

Courses continued

UNIVERSITY OF
BRADFORDPostgraduate Diploma
and M.A. in
INTERPRETING
AND TRANSLATING

An intensive one-year course for language graduates, including:

- specialized translation;
- conference interpreting;
- editing and abstracting;
- translation theory.

The course also features seminars by visiting professional linguists, regular interpreting practice at conferences and a placement with a major employer.

Formed students are employed in a wide range of fields including: UN, numerous government departments and British and European companies.

Applicants with an interest in obtaining a good honours degree must offer TWO languages from: FRENCH, GERMAN, RUSSIAN. Successful candidates are nominated by the Selection Committee.

Dates and applications from: Postgraduate Admissions Secretary, Modern Languages Centre, University of Bradford, West Yorkshire BD7 1UP or Tel: 0274 733498 Ext. 6218.

Closing date: 1st March for courses starting in October 1984. (18304)

University of Bath
MASTERS DEGREES
IN EDUCATION

Including specializations: Educational Technology, Educational Research, Educational Management, Educational Policy, Educational Sociology, Educational Psychology, Educational History, Educational Geography, Educational Economics, Educational Law, Educational Medicine, Educational Arts and Crafts, Educational Music, Educational Drama, Educational Dance, Educational Film and Television, Educational Computing, Educational Communications, Educational Media, Educational Publishing, Educational Design, Educational Illustration, Educational Photography, Educational Videography, Educational Audio, Educational Video, Educational Music, Educational Drama, Educational Dance, Educational Film and Television, Educational Computing, Educational Communications, Educational Media, Educational Publishing, Educational